AN ANALYSIS OF THE RELATIONSHIP BETWEEN SUBJECTIVE WELL-BEING AND ITS PREDICTORS

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AN ANALYSIS OF THE RELATIONSHIP BETWEEN SUBJECTIVE WELL-BEING AND ITS PREDICTORS

by

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Abstract

This thesis examined two issues with respect to subjective well-being. These issues were: a) enhanced prediction of subjective well-being by the use of multiple predictor classes, and b) the relationship between subjective well-being and it's predictors. Two hundred seventy-seven participants ranging in age from 18 to 48 years were administered the Memorial University of Newfoundland Scale of Happiness (MUNSH), the Satisfaction with Life Scale (SWLS), the NEO Five-Factor Personality Inventory (NEO-FFI), a daily hassles and uplifts scale, two personality resource measures, and a domain satisfactions scale. Simultaneous examination of various predictor classes enhanced prediction of subjective well-being. Environmental variables, life domains, personality resources, and personality traits accounted for 59% of total variance in subjective well-being as measured by the MUNSH. However, only environmental variables, life domains, and personality resources made an independent contribution to an explanation of SWLS variance. In combination, these variables account for 48% of variance in SWLS scores. As in past research, a bi-directional model which includes both state (bottom-up) and trait (top-down) effects best explains the relationship between predictors and subjective well-being.

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Introduction

Subjective well-being consists of two parts, a cognitive and an affective component (Andrews & Withey, 1976). The affective component is best understood as a hedonic balance constituting one's overall emotional tone while life satisfaction is the cognitive component of subjective well-being. Life satisfaction occurs when people are satisfied in a number of life domains such as work, relations, and finance (Diener, Emmons, Larsen, & Griffin, 1985). It appears that the person who experiences subjective well-being not only has many positive feelings, but has many positive thoughts.

Subjective Well-Being - Conceptual Approaches

Different terminology for subjective well-being may reflect the different philosophical, conceptual, and methodological orientations of investigators in this area. Subjective well-being has been defined in ethical, theological, spiritual, political, clinical, and economic terms (Diener, 1984). For example, theological conceptions of subjective well-being equate it with happiness, which has been defined and measured according to a person's level of faith and commitment to their religion (Myers & Diener, 1995). Since subjective well-being can be defined in many ways with each perspective emphasizing a different aspect of well-being, it has many labels that include happiness, life satisfaction, morale, adjustment, psychological well-being, well-being, mood, and mental health.

One approach to subjective well-being gives priority to the affective states that people experience. In this approach, the central construct is happiness. Bradburn (1969) noted that positive and negative affective states are important causal links for predicting

subjective well-being. His approach stressed the importance of an individual's level of positive and negative affect. The difference between a person's positive and negative affect is used to indicate one's affective balance. This outlook concentrates on the frequency and intensity of positive and negative affect; the particular life domain where these emotions originate is of little consequence. A happy person is one who experiences a preponderance of positive over negative affect (Bradburn, 1969).

The second approach to studying subjective well-being comes from early work examining adaptation to aging and is known as the contentment, or life satisfaction, approach (Kozma & Stones, 1996). The logic behind this approach is that if one has a favorable evaluation in many life domains, such an evaluation will lead to an overall positive outlook of one's life and the experience of higher levels of subjective well-being. For example, a person who is satisfied with their job, love life, and financial status is more likely to feel a greater sense of well-being than someone who is not satisfied in these same life domains. Life satisfaction covers a longer temporal span as it defines an overall summary of a person's life, usually manifested through one's cognitions, attitudes and beliefs.

For ease of communication it seems appropriate to adopt one term to identify the construct in question. Therefore, where appropriate, the broader term subjective well-being will be used. Employing the term subjective well-being seems sensible given that studies have found a high level of convergent validity among measures representing a wide range of outcomes such as life satisfaction, happiness, and morale. In constructing

the Memorial University of Newfoundland Scale of Happiness (MUNSH). Kozma and Stones (1980, 1983) determined that other commonly employed measures such as the Affect Balance Scale (Bradburn, 1969), Philadelphia Geriatric Center Morale Scale (Lawton, 1975), and the Life Satisfaction Index (Neugarten, Havighurst, & Tobin, 1961) were tapping a single underlying construct which they named happiness (Kozma & Stones, 1986). All the variance in avowed happiness scores explained by the Affect Balance Scale, Philadelphia Geriatric Center Morale Scale , and the Life Satisfaction Index was contained in the MUNSH.

Predictors of Subjective Well-Being

One current concern in the literature is how to account for the maximum amount of variance in subjective well-being scores. More specifically, investigators are interested in knowing two things: a) the significant predictors of subjective well-being, and b) the individual contribution to the explanation of subjective well-being made by these predictors. With respect to the first issue, four general predictor types have been proposed: a) environmental variables such as daily hassles, daily uplifts, and major life events; b) life domains and their associated satisfactions; c) personality resources; and d) personality traits (Costa & McCrae, 1989; Kozma, Stone, & Stones, 2000). In terms of the second issue, studies simultaneously examining the contribution that various predictors make to subjective well-being are, to the knowledge of the investigator, few and far between. Kozma, Stone, and Stones (2000) systematically examined the contribution of various predictors of subjective well-being. However, their analyses did

not include personality traits, as measured by Costa and McCrae (1989), or an extensive array of personality resources. In particular, personality resources, as proposed by Ryff (1989), were not included in the array of predictors that were subjected to analysis.

To provide an accurate account of the amount of variance in subjective well-being that can be explained by these four general predictor classes, it is necessary to include personality traits and a full complement of personality resources. This thesis will attempt to explain more variance in subjective well-being scores by simultaneously examining significant predictors from each class on two major measures of subjective well-being. The first hypothesis can be stated as follows: the proportion of variance in subjective well-being that can be accounted for should improve as a function of the number of predictor classes that are examined simultaneously.

Environmental Variables

Some investigators maintain that a person's level of subjective well-being is determined by their reactions to environmental variables such as infrequently occurring life events and the daily uplifts and daily hassles that people experience (Stones & Kozma, 1986).

Daily hassles such as family arguments and financial stresses have been defined as "chronic daily stresses of a repetitive and stable nature" (Holahan, Holahan & Belk, 1984, p. 315). Uplifts are also stable and repetitive, occurring on a daily basis, but are generally regarded as experiences of a pleasant nature. Examples of uplifts are going out with friends and reading a good book. People who experience more positive uplifts than

hassles presumably experience a higher level of subjective well-being due to the aggregated effects of positive and negative affect produced by these hassles and uplifts (Block & Zautra, 1981; Headey, Holmstrom & Wearing, 1984; Kafka,1996)

An examination of the predictive ability of environmental variables shows that hassles are a more powerful predictor of subjective well-being than uplifts are (Chamberlain & Zika, 1990; Lewinsohn, Redner, & Seeley, 1991).

As opposed to daily hassles and uplifts, life events usually denote more discrete and infrequent occurrences such as the death of a spouse, an illness, or loss of employment. Life events exert the greatest effect on longer spans of time as assessed by future happiness. These results are reflected in studies that indicate that major life events have short lived effects (Costa, McCrae & Zonderman, 1987). For example, Brickman, Coates and Janoff-Bulman (1978) reported that a major favorable life event (e.g., winning a lottery) and a major unfavorable life event (e.g., becoming a paraplegic in a car accident) had little effect on people's overall level of subjective well-being. Comparisons of a sample of 22 lottery winners, 29 paralyzed accident victims, and 22 controls revealed that accident victims reported less happiness than lottery winners or control groups on past or present happiness, but not on beliefs about their future happiness. Interestingly, paraplegics ratings of happiness were still above the midpoint and suggest that this group was still fairly happy.

The amount of variance that daily hassles and uplifts and major life events account for in subjective well-being scores depends upon the time frame considered.

Daily hassles and uplifts appear to play a bigger role in determining people's current, everyday subjective well-being, rather than subsequent subjective well-being (Chamberlain & Zika, 1992). Kanner, Coyne, Schaefer, and Lazarus (1981) demonstrated that when prior well-being was partialled out, the variance accounted for in current subjective well-being attributable to current hassles, was small (i.e., 1 to 9%) and prior hassles made no contribution whatever.

Overall, hassles, uplifts and life events do not account for a tremendous amount of the variance in subjective well-being. In combination, daily hassles/uplifts and major life events account for only 5% to 19% of variance in subjective well-being scores (Kozma, Stones & McNeil, 1991).

Other environmental variables that are examined in the subjective well-being literature are the objective aspects of domain satisfactions and demographic characteristics (e.g., housing quality, material possessions) and fit under the heading of social indicators. In general, social indicator variables such as one's education level and income are weak predictors of subjective well-being (Brickman et al, 1978; Myers & Diener, 1995). Andrews and Withey (1976) found that variables in combination or on their own, such as age, family cycle stage, family income, education, race, and sex could explain only a meager 8% of the total variance in life satisfaction. More importantly, a person's subjective domain satisfactions are better predictors of subjective well-being than the objective conditions of a person's life (Diener, 1984; Emmons & Diener, 1985). For this reason domain satisfactions rather than their objective counterparts will be used

in the predictor array of the present investigation.

Life Domains

The second predictor class is life domain satisfactions. A life domain approach proposes that global subjective well-being results from some subjective weighting of satisfactions in specific life domains (Andrews & Withey, 1974; Feist, Bodner, Jacobs, Miles, & Tan, 1995; Headey, Holmstrom, & Wearing, 1985; Mastekaasa, 1984; Near, Rice, & Hunt, 1980; Rice, McFarlin, Hunt, & Near, 1985). People feel either positive or negative about the experiences that are associated with a particular domain. Summing up these emotions enables a person to come to some sort of judgment about the level of satisfaction they experience in a domain. Once a judgment about the level of satisfaction for each relevant domain is made this information can be summed up to make a judgment about people's overall subjective well-being. For instance, Near, Rice, and Hunt (1980) found that satisfaction with work, family, leisure, and political activities led to global satisfaction with life in general.

Life domains are measured by objective and subjective means (Lawton, 1983; McNeil, Stones & Kozma, 1986). Generally, subjective satisfactions are frequently used as predictors of subjective well-being instead of objective criteria. Two reasons seem to account for the greater reliance on subjective measures. First, subjective measures are often easier to obtain. For example, asking people to rate their income satisfaction is far less intrusive than getting them to produce their financial portfolio. More importantly, it seems that subjective life domain measures have a stronger correlation with subjective

well-being than more objective life domain measures (Diener, 1984; Emmons & Diener, 1985; Stone, 1995). Kozma, Stones and McNeil (1991) found the following discrepancies between objective and subjective life domain measures in their ability to explain amount of subjective well-being variance in elderly participants: 10% to 20% for subjective health vs. 4% to 7% for objective health; 3% to 30% for subjective housing vs. 1% to 4% for objective housing; 1% to 30% for subjective finance vs. 1% to 4% for objective finance; 1% to 13% for subjective marriage vs. 1% to 4% for objective marriage; and 3% to 25% for subjective employment vs. 0% to 1% for objective employment. These patterns of results seem to be consistent across a wide range of age samples (Argyle, 1987; Stone, 1995).

A more challenging issue in this area is determining the more important independent domain satisfactions that predict subjective well-being. The following list makes up a complete array of life domains without becoming redundant: work, education, marital/partner, family, friendships, physical activity, leisure, transportation, health, housing, finances, spiritual/religious, self/self-esteem, biological needs, and physical appearance. This list is the culmination of many investigators' research and are believed to represent the domains that are most important to a person's judgments of life satisfaction (Blais, Vallerand, Briere, Gagnon, & Pelletier, 1990; Campbell, Converse, & Rodgers, 1976; Cummins, 1996; Diener, Sandvik, Seidlitz, & Diener, 1993; Diener, Suh, Lucas, & Smith, 1999; Diener, Suh, Smith, & Shao, 1994; Herzog & Rodgers, 1981; Kozma & Stones, 1983; Michalos, 1980; Vermunt, Spaans, & Zorge, 1989). In general,

domains such as family relations, friendship, marital/partner relationships, education, appearance, self-esteem, leisure, finances, and health emerge as significant predictors of well-being (Campbell, Converse, & Rodgers, 1976; Diener, Suh, Lucas, & Smith, 1999; Kozma & Stones, 1983; Michalos, 1980; Michalos, 1985; Vermunt, Spaans, & Zorge, 1989).

Despite the overlap in predictors, there are inconsistencies in the amount of explained variance and predictor array that emerges which may reflect differences in the population under study. For instance, Kozma and Stones (1983) found that domains such as housing satisfaction, activity, perceived health, martial status and financial satisfaction accounted for about 36% of the variance in satisfaction scores in an elderly sample. Moreover, these investigators demonstrated that domains important for a person's judgments of well-being in urban and institutional persons (i.e., housing satisfaction, health, activities, changes in life events) were different from the domains that rural people considered important (i.e., health and marital status). On the other hand, Michalos (1985) examined predictors of life satisfaction in Canadian university students and found that domains such as health, family relations, work, friendships, appearance, and education were significant predictors of life satisfaction accounting for approximately 45% of total variance in satisfaction scores.

Another reason there are inconsistencies in the domain satisfaction literature may be due to the different outcome measures used in the research. Measures that are explicitly designed to test the life satisfaction component of well-being, such as the

Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985), are more sensitive to the effects of life domains. Greater sensitivity of satisfaction measures is reflected in a greater amount of explained variance exhibited in studies that use this type of measure. Measures that take an affective-based approach to well-being are less sensitive to the effects of life domains resulting in comparatively lower amounts of explained variance. Michalos (1985) examined life domain predictors of subjective well-being using both a single-item measure of life satisfaction and a single-item measure of happiness and found that while the life satisfaction measure accounted for 53% of the total variance in well-being the happiness measure only accounted for 39% of the total variance in well-being.

Overall, domains account for between 30% to 53% of total variance in subjective well-being scores. The upper limit of explained variance is only attained when a personality resource (e.g., self-esteem/self-satisfaction) is included in the array of domain satisfactions. Variability in results is a function of: a) subject characteristics and b) properties of the outcome measure used. To make an overall statement about the domains that make a significant contribution to the prediction of subjective well-being is difficult to do considering the heterogeneous samples that have been examined in past research. Nevertheless, some combination of the following domains usually emerge as significant predictors of well-being: family relations, friendship, marital/partner relationships, education, appearance, self-esteem, leisure, finances, and health.

Domain satisfactions are subjective in the sense that people integrate the various

life domains in a highly individualized way by assigning different weights on the basis of a domains importance to a person's level of well-being (Diener, Emmons, et al., 1985). However, domain satisfactions do not necessarily directly effect a person's overall level of well-being, rather, their effects may be subject to a number of moderating influences. One type of moderating influence is personality resources (Kozma, Stone, & Stones, 2000).

Personality Resources

Personality resources refer to the coping styles people use to deal with the negative environmental effects they experience (Alday, 1998; Lachman & Weaver, 1998). For instance, Lachman and Weaver (1998) demonstrated that the effect of low income on people's subjective well-being was mediated by their control beliefs.

The theoretical basis for the personality resource perspective comes from studies looking at the importance, factor structure, and measurement of life attitudes. The Purpose In Life test and Seeking of Noetic Goals test, both based on Victor Frankl's belief that man's primary motive is the "will to meaning", are two measures which assess the degree to which individuals have meaning and purpose in life (Crumbaugh, 1977). Factor analytic studies confirmed not only the complementary nature of the Seeking of Noetic Goals test and the Purpose in Life test, but that life attitudes are best understood as a multidimensional concept (Reker & Cousins, 1979). In an attempt to construct a reliable and valid measure of life attitudes, Reker and Peacock (1981) devised the Life Attitude Profile (LAP). The LAP is a multidimensional scale composed of seven dimensions

which measure Life Purpose (i.e., zest for life, fulfillment, contentment, life satisfaction), Will to Meaning (i.e., striving to find meaning in personal existence), Future Meaning (i.e., determination to make the future meaningful), Life Control (i.e., freedom to make life choices, exercise of responsibility), Existential Vacuum (i.e., lack of purpose and goals), Death Acceptance (i.e., lack of fear or anxiety about death), and Goal Seeking (i.e., desire to achieve new goals). Particular emphasis was placed on the degree of existential meaning and purpose in life defined as "the extent to which the meaning of personal existence has been discovered as well as on the strength of motivation to find meaning and purpose" (Reker & Peacock, 1981, p.264). According to this perspective, subjective well-being is a function of the extent to which people experience a sense of meaning and purpose in life. People who experience high subjective well-being view life as a meaningful and purposeful endeavor, while people who do not take this view experience low levels of subjective well-being.

Stability in subjective well-being scores can be attributed to two personality constructs or resource variables, Meaning and Optimism. Reker and Wong (1985) state that Optimism is made up of three main components which are associated with a future frame of reference: a) subjective expectancies; b) feelings; and c) goal strivings. Evidence seems to suggest that this model provides a reasonable way to structure subjective well-being as both Optimism and Meaning appear quite stable over a considerable time period correlating with subjective well-being scores (Kozma, Stone, & Stones, 1996). Sweetman, Munz, and Wheeler (1993) demonstrated a significant

correlation between Optimism and well-being. Reker, Peacock and Wong (1984) explored the correlates of meaning and purpose across the life course and demonstrated that the seven dimensions correlated significantly with subjective well-being, especially Life Purpose and Life Control.

Ryff (1989) also proposes that subjective well-being is best conceived as a multi-dimensional construct made up of life attitudes. Based on tenets of humanistic psychology like Purpose in Life, and Autonomy, Ryff centers attention on normative criteria for mental health. The result is a means for assessing a person's level of positive functioning and psychological well-being. Ryff (1989; 1991) argues that common conceptions and measures of subjective well-being have little theoretical grounding, fail to include any external criteria for measuring one's mental health, neglect important aspects of positive psychological functioning, and suffer from construct overlap with other areas of psychology such as personality (Schmutte & Ryff, 1997).

Ryff (1989) created the Scales of Psychological Well-Being (SPWB) based on an integration of mental health, clinical, and life span developmental theories. She defines six dimensions which she states are not mere affirmations of a two-factor model, but, rather, are the underlying factors of well-being. These dimensions are assumed to measure all aspects of well-being and include Self-Acceptance, Positive Relations with Others, Autonomy, Environmental Mastery, Purpose in Life, and Personal Growth (Ryff, 1989). In spite of the moderate to high correlations found among the scales, there is evidence to suggest that the six dimensions of well-being are independent constructs

(Schmutte & Ryff, 1997). Findings have shown that the six scales have different age trajectories and gender profiles (Ryff & Heindrich, 1991). For instance, Ryff (1989) found that women scored higher on Positive Relations with Others and Personal Growth than men. Moreover, general age trends revealed higher scores among the middle-age respondents than older persons on Purpose in Life. Both middle-age respondents and older people scored higher than younger adults on Environmental Mastery. Young adults and middle-age adults scored higher on Personal Growth than did older adults.

Ryff and Reker's sets of personality resources share a number of common characteristics. Both resources draw on the literature from humanistic psychology and employ tenets like Purpose in Life, Autonomy, and Life Control to the understanding of well-being. Second, both approaches purport to measure positive psychological functioning, although there is a fundamental difference with respect to the last point. Reker states that positive psychological functioning is but one component of subjective well-being, while Ryff asserts that positive psychological functioning and subjective well-being are synonymous constructs. However, Ryff's scales of well-being do not always correlate highly with traditional measures of subjective well-being. Correlations between the SPWB and measures of subjective well-being such as the Affect Balance Scale, Life Satisfaction Index, Self-Esteem Scale (Rosenberg, 1965), Levenson's Internal Locus of Control Scale (Levenson, 1974), and the Philadelphia Geriatric Center Morale Scale (Lawton, 1975) range between .25 to .73 (Ryff, 1989). One could argue that the sub-scales on the SPWB are best considered personality resource predictors rather than an

outcome measure of subjective well-being. Overall, personality resources that are important to the prediction of subjective well-being are Life Control and Life Purpose from Reker's set of resources (Reker & Peacock, 1981). Not surprisingly, these are also the resources whose scales demonstrate the highest internal consistency on the LAP (Reker & Peacock, 1981). To the knowledge of the investigator, no study has examined which of Ryff's (1989) six personality resources make a significant independent contribution to the prediction of subjective well-being.

To restate, personality resources generally refer to the coping styles people use to deal with the negative environmental effects they experience. People show a great deal of consistency in how they cope with situations in terms of the efficiency and success. Some people are able to deal successfully with many of life's problems, whereas others deal poorly with many situations in many contexts (Filipp & Klauer, 1991; Wirtz & Harrell, 1987). Successful coping styles should enhance subjective well-being.

Personality Traits

The fourth predictor class is personality traits. Perhaps the most studied of all the personality traits in relation to subjective well-being are two of Costa and McCrae's big five personality traits, Extraversion and Neuroticism (Diener, Suh, Lucas, & Smith, 1999, Emmons & Diener, 1985, 1986; Warr, Barter, & Brownbridge, 1983). Costa and McCrae's (1980) model of happiness explicitly states that people's levels of subjective well-being are attributable to individual differences in levels of positive and negative affect which are a result of individual differences in the stable traits of Extraversion and

Neuroticism. Extraversion predisposes people towards positive affect, whereas Neuroticism predisposes people towards negative affect (Headey & Wearing, 1989; McFatter, 1994). Kafka (1996) examined Extraversion and Neuroticism and found that higher levels of Extraversion and lower levels of Neuroticism were associated with higher levels of subjective well-being. Moreover, DeNeve and Cooper (1998) performed a meta-analysis consisting of 137 distinct personality constructs as correlates of subjective well-being. Grouping all the personality traits according to the big five factors led to the conclusion that Neuroticism was the strongest predictor of life satisfaction, happiness, and negative affect. Positive affect was predicted equally well by Extraversion and Agreeableness. Agreeableness has received scant attention as a correlate of subjective well-being with only a few studies examining the relationship between these constructs. Broughton and Teh (1992) examined the unique variance that would be contributed by Agreeableness, Conscientiousness, and Openness to Experience to the prediction of life satisfaction when Extraversion and Neuroticism were partialled out. Although Extraversion and Neuroticism received the strongest standardized weights in linear combination, only Agreeableness added significant unique variance to the prediction of life satisfaction over and above Extraversion and Neuroticism. Some researchers maintain that the effect of Agreeableness on subjective well-being is due to the fact that positive affect stems primarily from our connections with others, both in terms of number of relationships (i.e., Extraversion) and the quality of those relationships (DeNeve & Cooper, 1998). Relationship type personality traits such as Extraversion foster not only

positive affect, but better relationships which is source of happiness (Myers & Diener, 1995).

Despite the fact that Costa and McCrae's (1980) model can account for some stability found in subjective well-being scores, the amount of explained variance attributable to Neuroticism and Extraversion has been relatively small (Kozma, Stone, & Stones, 1996). On average, Extraversion accounts for approximately 4% and Neuroticism accounts for approximately 10% of the variance in subjective well-being (Costa & McCrae, 1980; Costa, McCrae, & Norris, 1981; Emmons & Diener, 1985; Kozma, Stones, & McNeil, 1991; McCrae & Costa, 1983).

Improving the Prediction of Subjective Well-Being

One current concern in the well-being literature is how to increase the amount of variance in subjective well-being that can be explained by its predictors. Surprisingly, there are few studies which simultaneously examine environmental variables, life domain satisfactions, personality resources, and personality traits. Kozma, Stone, and Stones (2000) examined predictors of subjective well-being such as environmental variables, life domains, and personality resources at three points in time within a 48 month period. On average, environmental variables, life domains, and personality resources accounted for approximately 61% of total variance in subjective well-being scores. However, the Kozma, Stone, and Stones (2000) study did not include either personality traits, such as those measured by Costa and McCrae (1989), or an exhaustive array of personality resources like Ryff's (1989). Perhaps enhanced prediction of subjective well-being can be

achieved by simultaneously examining environmental variables, life domains, an exhaustive array of personality resources, and personality traits. The first hypothesis is the amount of variance in subjective well-being that can be explained should increase as a function of the number of predictor classes that are examined simultaneously.

Predictor-Subjective Well-Being Relationship

Another issue that has not been resolved is the relationship between subjective well-being and it's predictors. Three models which have been proposed by various investigators to conceptualize the relationship between predictors and subjective well-being are: bottom-up, top-down, and bi-directional models of subjective well-being (Kozma & Stone, 1996; Headey, Veenhoven, & Wearing, 1991; Lance, Lautenschlager, Sloan, & Varca, 1989).

Bottom-up Models

The philosophical foundations for this approach is Lockean Realism. Investigators who adopt Realism as their approach understand subjective well-being by reference to less abstract, lower-order terms (Kozma, Stones, & McNeil, 1991). According to this position, subjective well-being results from having many specific moments of happiness in life (Diener, Sandvik, & Pavot, 1991). Environmental variables such as the number of daily uplifts and hassles that a person experiences are seen as the primary predictors of their level of subjective well-being. According to this perspective, the happy person is one who experiences more daily uplifts than hassles or feels primarily positive about a number of life domains.

Overall Analysis of the Bottom-up Approach. Bottom-up approaches have not fared well due to their inability to explain certain findings such as above median ratings on subjective well-being scales in all populations studied (Kozma & Stones, 1996) and minor differences in subjective well-being across cultures (Diener & Diener, 1996). Contrary to a bottom-up approach, investigators also demonstrate differential induction effects across components of well-being (Kozma, Stone, Stones, Hannah, & McNeil, 1990) and the presence of both trait (i.e., top-down approach) and state effects (i.e., bottom-up approach) in variance partitioning studies of subjective well-being (Kozma, Stone & Stones, 1997).

Kozma et al., (1990) examined current happiness employing both the positive and negative long-term experiential sub-scales of the MUNSH. Multiple R for current happiness was .28 but increased to .52 when positive and negative short-term components were added, a finding that suggests that subjective well-being contains both state (i.e., bottom-up) and trait (i.e., top-down) components.

Experimental studies utilizing the Velten Mood Induction Technique (Velten, 1968) have demonstrated the existence of short-term (i.e., state) and long-term (i.e., trait) components in subjective well-being. Since the Velten procedure manipulates current mood states, changes should be noticeable in one's state subjective well-being and not trait subjective well-being. Kozma et al. (1990) were the first to experimentally manipulate mood to determine the structure of subjective well-being. Proposing a four-component model of subjective well-being (i.e., two long-term components-positive

experiential, negative experiential and two short-term components-positive affect and negative affect), mood induction produced a significantly greater change in the short-term components than in the long-term components of subjective well-being. The differential induction effects demonstrated that subjective well-being contains both state and trait components.

Other evidence against bottom-up models comes from studies on the predictive power of personality, life events, and social indicators. Since bottom-up models emphasize the importance of lower order constructs on one's level of subjective well-being, one would expect these variables to exhibit considerable predictive power. Unfortunately, most studies demonstrate that variables such as life events and personality account for small amounts of variance in subjective well-being (Costa & McCrae, 1980; Costa, McCrae, & Norris, 1981; Emmons & Diener, 1985; Kozma, Stones, & McNeil, 1991). Social indicators also appear to be weak predictors of subjective well-being. Myers and Diener (1995) claim that: " Knowing a person's age, sex, race, and income (assuming the person has enough to afford life's necessities) hardly gives a clue" (p.17). Andrews and Withey (1976) found that variables such as age, family cycle stage, family income, education, race, and sex, in combination or on their own could explain only a meager 8% of the total variance for life satisfaction. In a meta-analysis of 146 studies, gender accounted for less than 1% of people's subjective well-being (Haring, Stock, & Okun, 1984).

If the bottom-up model is supported, the expectation is that differences in levels

of well-being should be observed among groups of people who differ with respect to their finances, marriage, work, health, and friendships. In particular, people from disadvantaged groups should report a lower level of subjective well-being by virtue of the fact that they are more likely to experience averse life circumstances (e.g., less money, less satisfying work). However, most people including those in disadvantaged groups, report a positive level of well-being (Diener & Diener, 1996). Cross-national data also suggests that people in most countries experience a positive level of well-being, with the exception of very poor countries. Diener and Diener (1996) demonstrated that in 86% of the 43 countries examined, there was above median ratings in level of subjective well-being experienced.

Top-down Models

Top-down models of subjective well-being assume that people have a predisposition to interpret life experiences in either positive or negative ways (Feist et al., 1995; Lance, Mallard, & Michalos, 1995). In particular, top-down models have implications for levels of mood and affect that people experience (Stones & Kozma, 1980, 1986a, 1986b). According to Stones and Kozma (1989), people have "a dispositional core of happiness that affects the way people perceive their current life events and circumstances (i.e., positively or negatively), influences whether past events are remembered fondly or with despair, and creates optimistic/pessimistic expectations about what the future holds" (p.527). Top-down models are useful for explaining why intraindividual mood variations are regularized around a stable midpoint that differs

among happy and unhappy people (Stones & Kozma, 1989), the stability of subjective well-being scores, and the limited impact that environmental variables seem to have. However, unlike bottom-up models, top-down models are not able to account for transient shifts in a person's level of well-being (Kozma, Stone, & Stones, 2000). As a consequence, some investigators have proposed a bi-directional model as a synthesis of bottom-up and top-down approaches to subjective well-being.

Bi-directional Models

The third approach to explaining the relationship between subjective well-being and it's predictors is by means of bi-directional models. Kozma and Stones' (1980, 1996) propensity or disposition model includes elements of both top-down and bottom-up approaches and can be viewed as a bi-directional approach to the study of subjective well-being. Subjective well-being has properties of a trait by providing temporal and cross-situational stability, but also as a state in its reactivity to environmental change (Kozma & Stones, 1996).

In bi-directional models, trait effects should emerge as significant path coefficients from the superordinate well-being construct to variables in the four classes of predictors. State effects should show up as significant path coefficients from the variables in the four predictor classes to the superordinate well-being construct.

Studies of model comparisons. Evidence for a top-down/bi-directional model has been obtained using a variety of procedures such as Structural Equation Modeling and the Simon-Blalock Technique. Structural Equation Modeling assesses the degree of fit between models and obtained data, whereas the Simon-Blalock Technique is a partial correlation procedure designed to eliminate spurious correlations between life domains (Kozma & Stones, 1996).

The usefulness of the Simon-Blalock Technique as a method for determining which type of model best represents the data rests on the assumption that differential patterns of intercorrelations of domains should emerge for bottom-up and top-down models. Employing the Simon-Blalock Technique should eliminate most significant correlations among domains, if subjective well-being is structured in a top-down manner, since most intercorrelations are assumed to be a result of the top-down influences of subjective well-being. However, using the Simon-Blalock Technique should have no effect on the intercorrelations among domains if a bottom-up model is more accurate because correlations among domains are not spurious. The reason is that domains affect subjective well-being in the bottom-up approach and not the other way around.

Findings with this procedure support the top-down approach. Stones and Kozma (1986) found that when the effects of subjective well-being were partialled out, significant intercorrelations among domains dropped to non-significance in a study that examined the association between subjective well-being and a number of domain satisfactions. Underhill, Reker and Stones (1996) found similar results when looking at

the relationship between subjective well-being and domain and resource variables (i.e., Optimism and Meaning). When the effects of subjective well-being were partialled out, significant intercorrelations between domains and resource variables dropped to non-significance providing evidence for a top-down model of subjective well-being. A multivariate multiple regression procedure was used to confirm support for a propensity/bi-directional model. In this analysis, environmental effects, such as stress and physical symptoms, and global measures of subjective well-being acted as the independent variables, and personality resource variables, such as Optimism and Meaning, were treated as the outcome measures. The resulting path model that best fit the data was a propensity/bi-directional model.

Structural Equation Modeling studies generally support a bi-directional model of subjective well-being. Mallard, Lance and Michalos (1997; Lance, Mallard, & Michalos, 1995) compared bottom-up, top-down and bi-directional models of subjective well-being to find out if a person's culture moderates the relationship between overall life satisfaction and satisfaction in particular life domains. Models were tested on data collected earlier from a global study of student well-being conducted in 32 countries. Bi-directional models received the strongest support in 29 of the 32 countries, while top-down models received the strongest support in the remaining 3 countries. Headey, Veenhoven and Wearing (1991) found support for a bi-directional model when three significant top-down linkages and one significant bi-directional linkage were obtained between domain satisfactions and subjective well-being in data from a Australian longitudinal panel study.

The last study to compare subjective well-being models was conducted by Kozma, Stone, and Stones (2000). Subjective well-being scores (i.e., MUNSH, SWLS), domain satisfaction scores (i.e., housing, health), resource data (i.e., Life Purpose and Life Control), demographic characteristics, and environmental factors such as hassles and uplifts were obtained. Results clearly supported a bi-directional model of subjective well-being. The bi-directional model was superior to top-down and bottom-up ones. It had the lowest Chi-Square value and the highest comparative fit indices. Chi-Square is a general index of fit that measures how accurately a model reproduces the observed correlations between all variables. The lower the Chi-Square value is, the better the obtained structure fits the data. The comparative fit indices reflects the improvement of Chi-Square goodness of fit over a null model (a model postulating no relationship between any of the variables). The higher the comparative fit index the better.

To date, the Kozma, Stone, and Stones (2000) study is the only one to systematically examine bottom-up, top-down, and bi-directional models of subjective well-being. However, this study did not examine all relevant predictors of subjective well-being. For instance, personality resources, as described by Ryff (1989), and personality traits as measured by Costa and McCrae (1989), were not included in this study. To extend the findings on the relationship between subjective well-being and it's predictors, it is necessary to also add personality traits and Ryff's resource variables to the predictor array

Thesis Statement

1) To enhance the predictability of subjective well-being, it is necessary to include an exhaustive array of variables from all predictor classes in the prediction equation. This study will examine the contribution of environmental variables, life domains, personality traits, and personality resources to the prediction of subjective well-being. Logically, predictive power should increase as the number of independent relevant variables from all predictor classes are placed in the prediction equation.

2) The second aim of this study is to determine whether a bottom-up, top-down, or bi-directional model best represents the relationship between subjective well-being and its predictors. This objective will be achieved by employing Structural Equation Modeling. Unlike previous studies, the present research utilizes an exhaustive array of relevant predictors that includes environmental variables, life domains, personality traits, and personality resources as measured by Reker (1981) and Ryff (1989). On the basis of the past literature, one would expect that the best model to explain the relationship among predictors and subjective well-being is a bi-directional model (Kozma, Stone, & Stones, 2000; Lance, Mallard, & Michalos, 1995; Mallard, Lance, & Michalos, 1997). Stated differently, hypothesis two is when comparing various models of subjective well-being, the best model to account for the relationship among predictors and subjective well-being will be a bi-directional model.

Method

Participants

Participants were university students at Memorial University of Newfoundland and the University of Winnipeg. Participants filled out questionnaires either to fulfill subject pool or class participation requirements. Three hundred thirty-five participants completed questionnaires for the study. Fifty-eight questionnaires were excluded from analyses either because of missing data or because responses failed to meet a consistency criterion for items 12 and 21 on the MUNSH.

Two hundred seventy-seven participants, ranging in age from 18 to 48 years, were included in the final sample. Close to sixty seven percent were female and 32.9% were male. The mean number of years of education participants completed was 14.13 (SD= 1.74). Approximately eighty three percent of participants were single, 10.1% were cohabiting, 1.1% were divorced, 4.3% were married, .4% were separated, and .7% were widowed.

Most participants lived in St.John's, Newfoundland (84.5%). Approximately fifteen percent of participants came from Winnipeg, Manitoba (15.5%).

Descriptive statistics for income level of participants and all other study variables are presented in Table 1a. Frequency statistics for relevant study variables are presented in Table 1b. All statistical procedures were performed using SPSS for Windows Version 6.1 (Norusis, 1993).

Instruments

Demographic information. Information on age, sex, marital status, education level, and income level were obtained for all participants. These variables are useful in allowing a comparison of participants to other studies (Appendix A).

Life Attitude Profile (LAP). This scale is a 46 item, 7-point likert scale derived from seven dimensions: Life Purpose, Existential Vacuum, Life Control, Death Acceptance, Will to Meaning, Goal Seeking, and Future Meaning (Reker & Peacock, 1981). The Life Purpose scale consists of 9-items which measure zest for life, fulfillment, and life satisfaction. Examples of items include "Basically, I am living the kind of life I want to live" and "I have discovered a satisfying life purpose". Existential Vacuum measures lack of meaning in life, lack of goals, free-floating anxiety. The Existential Vacuum scale contains 7-items including "I feel the lack of and a need to find a real meaning and purpose in my life". Life Control is a 6-item measure of freedom to make all life choices, the exercise of personal responsibility, and the perception of internal control of life events (Reker, Peacock, & Wong, 1987). Items include "My life is in my hands and I am in control of it". Death Acceptance is a 6-item measure looking at people's absence of fear and anxiety about death. An example of an item is "Some people are very frightened of death but I am not". The Will to Meaning scale contains 7-items examining a person's strivings to find concrete meaning in personal existence, a search for ideals and values, and an appreciation of life beyond the present. Items include "I think about the ultimate meaning in life" and "A period of personal hardship and suffering can help give

a person a better understanding of the real meaning of life" (Reker, Peacock, & Wong, 1987). Goal Seeking is a 6-item measure of the desire to achieve new goals, to search for new and different experiences, and to be on the move. An example would be "I would enjoy breaking loose from the routine of life". Future Meaning is a 5-item measure of future fulfillment, the acceptance of future possibilities, and positive expectations concerning oneself and one's future. Items include "I am determined to make my future meaningful" and "I feel that the greatest fulfillment of my life is yet in the future" (Reker, Peacock, & Wong, 1987). The LAP was chosen for it's theoretical significance as most of the constructs demonstrate significant relationships with well-being, particularly Life Control and Life Purpose (Reker, Peacock, & Wong, 1984). Most dimensions demonstrate good psychometric properties with alpha coefficients ranging from .56 to .83 (Reker, Peacock, & Wong, 1987) (Appendix B). Convergent validity with other life attitude measures range from .49 to .66 for Life Purpose and from .22 to .77 for Life Control (Reker & Peacock, 1981).

Memorial University of Newfoundland Scale of Happiness (MUNSH). The MUNSH is a measure of happiness that assesses adults of all ages (Kozma & Stones, 1988). This scale consists of 24 items composed of 5 positive affect (PA) type items such as " On top of the world ?" and 5 negative affect (NA) type items such as " Bitter about the way your life has turned out?". These items are expected to tap a shorter temporal span with emphasis on current, transitory affective states. The MUNSH also contains items that measure a dispositional component of happiness. Seven items of general

positive experience (PE), for example, " I am just as happy as when I was younger", and 7 items of general negative experience (NE), such as " Life is hard for me most of the time" make up the rest of the MUNSH. Scoring the MUNSH consists of assigning a value to each item of either two (which indicates that the statement is true for the person), one (which means that the participant does not know), or zero (which shows that the item does not apply to a particular person). A composite happiness score is obtained by taking the difference between positive and negative affect states and summing them with the difference between positive and negative general experiences (i.e. (PA-NA) + (PE-NE) = MUNSH total). Research employing the MUNSH has found that it is a strong measure of happiness in both validation and cross validation samples (Kozma & Stones, 1980). This measure is one of the best well-being instruments with excellent psychometric properties. Alpha coefficients average .85 and test-retest-reliability coefficients are .70 (Kozma & Stones, 1980). (Appendix C)

Measures of Life Domain Satisfactions. Items of this scale measure a person's satisfaction with fifteen life domains: work, education, family, marital/partner, friendship, physical activity, leisure, transportation, health, housing, finances, spiritual/religious, self/self-esteem, biological needs, and physical appearance. These items provide a comprehensive list of domains that correlate significantly with subjective well-being (Blais, Vallerand, Briere, Gagnon, & Pelletier, 1990; Campbell, Converse, & Rodgers, 1976; Diener, Sandvik, Seidlitz, & Diener, 1993; Diener, Suh, Lucas, & Smith, 1999; Diener, Suh, Smith, & Shao, 1994; Herzog & Rodgers, 1981; Kozma & Stones, 1983;

Michalos, 1980; Vermunt, Spaans, & Zorge, 1989). Each domains is rated on a 7-point scale with "7" indicating that a person feels extremely satisfied with a domain and a score of "1" indicating extreme dissatisfaction with a particular domain. The temporal stability of domain satisfaction measures ranges from .43 to .64 and their discriminant validity with measures of well-being ranges from .33 to .54 (Kozma et al., 2000; Appendix D).

NEO Five-Factor Inventory (NEO-FFI). The NEO-FFI (Costa & McCrae, 1989) is a short form of Costa and McCrae's personality inventory. This scale consists of 60 items that measure all domains of the big five personality traits. These domains include Extraversion, Neuroticism, Openness to Experience, Agreeableness, and Conscientiousness. Some examples of statements in the various domains are "I really enjoy talking to people" (Extraversion), "I often feel tense and jittery" (Neuroticism), "I try to be courteous to everyone I meet" (Agreeableness), "I'm pretty good about pacing myself so as to get things done on time" (Conscientiousness), and " I often enjoy playing with theories or abstract ideas" (Openness to Experience). The NEO-FFI provides 12 statements for each of the five factors. Items are measured on a five-point Likert-type scale, ranging from "strongly disagree" at one end to "strongly agree" at the other end. To control for acquiescence, several items are reverse keyed. The NEO-FFI demonstrates good psychometric properties with reliability and validity coefficients ranging from high .80's to low .90's (Costa & McCrae, 1985). This scale is the most widely used personality measure of well-being (Kafka, 1996; Appendix E)

Revised Hassles and Uplifts Scale. Items for this scale were derived from the

revised version of the Hassles and Uplifts Scale (Delongis, Folkman, & Lazarus, 1988). The Hassles scale consists of 10 items and the Uplifts scale contains 12 items. Examples of items include: "Regrets over past decisions" (hassle) and "Being complimented" (uplift). Participants are asked to indicate whether they have experienced a hassle/uplift during the last 30 days. If a person has not experienced a hassle or uplift they should check "Haven't Had". For those who have experienced a hassle/uplift, they are asked to estimate how strong an impact it has had on their life by selecting one of the following: "Somewhat", "Moderately", or "Extremely". This scale possesses adequate psychometric properties. The alpha coefficient for Hassles is .81 and for Uplifts it is .79. Discriminant validity based on relevant affect measures ranges from .33 to .34 (Kanner et al., 1981). The measure has been found to predict well-being in several studies (Kozma et al., 2000; Kozma et al., 1991; Appendix F).

Satisfaction With Life Scale (SWLS). This scale consists of five items which assess a participant's satisfaction with life as a whole (Diener, Emmons, et al., 1985). Scoring consists of a 7-point likert scale with a score of 1 indicating strong disagreement with a statement and a score of 7 demonstrating strong agreement with a statement. The SWLS does not assess satisfaction on specific life domains such as health or finances, but takes into account the fact that individuals have their own personal criteria and set of values for determining life satisfaction (Pavot & Diener, 1993). As a result, the scale allows participants to integrate and weight these domains in whatever way they chose. Examples of items include: "In most ways my life is close to my ideal" and "So far I have

gotten the important things I want in life". The SWLS demonstrates strong internal consistency and moderate temporal stability. Diener, Emmons, Larsen, and Griffin (1985) demonstrated an alpha coefficient of .87 and a 2-month test-retest reliability of .82. The SWLS appears to have good construct validity and evidence from a number of independent sources suggests evidence of discriminant validity as well (Pavot & Diener, 1993). This scale is one of the most widely used measure of well-being (Diener et al., 1999; Appendix G)

Scales of Psychological Well-Being (SPWB). This structured, self-report instrument is based on six dimensions that point to different aspects of positive functioning (Ryff, 1989). The instrument is made up of six scales representing the dimensions of Self-Acceptance, Positive Relations with Others, Autonomy, Environmental Mastery, Purpose in Life, and Personal Growth. Examples of items in each domain are: "possesses a positive attitude toward the self" (Self-Acceptance); "has warm, satisfying, trusting relationships with others" (Positive Relations with Others); "able to resist social pressures to think and act in certain ways" (Autonomy); "has a sense of mastery and competence in managing the environment" (Environmental Mastery); "has goals in life and a sense of directedness" (Purpose in Life); "has a feeling of continued development" (Personal Growth). Each dimensional scale contains 20 items equally split between positive and negative items which is scored on a 6-point scale ranging from strongly agree to strongly disagree. Ryff's scales have found to correlate positively with prior measures of well-being such as the Affect Balance Scale (Bradburn, 1969) and

Neurgarten's (1961) Life Satisfaction Index and negatively with measures of depression like Zung's (1965) Depression Scale. Internal consistency (alpha) coefficients for the six scales range from .82 to .90 (Schmutte & Ryff, 1997). Ryff's scales should be considered experimental in nature. However, since they provide the only alternative to the LAP it was necessary to include them in the current study (Appendix H)

Procedure

Subjects signed a consent form before beginning the rest of the test battery. The introductory message stated that the researcher was interested in knowing more about how people make judgments of life satisfaction. In particular, the researcher was interested in discovering what life domains are significant predictors of life satisfaction. Moreover, the consent form also included a section stating the second purpose of the study: assessing different investigators' theories of well-being and discovering the set of predictors that best determines a person's level of subjective well-being. The consent form assured responders that responses would be confidential, that participation was voluntary, and that the study had been approved by a board of ethics. Participants were given the option to stop at any point without penalty. No deception, or physical and psychological aversives were used.

A package of questionnaires was given to each participant. This package was organized in the following manner: the consent form, a demographics sheet, a measure of life domain satisfactions, the MUNSH, the SWLS, the LAP, the Revised Hassles and Uplifts Scale, the NEO-FFI, and the SPWB.

Introductory Psychology students completed the questionnaire during group sessions in large lecture halls at Memorial University of Newfoundland and the University of Winnipeg. Students taking Personality Psychology at Memorial University of Newfoundland completed the questionnaire in two group sessions during a class laboratory period

Results

Evaluation of Hypothesis 1

The first hypothesis is the amount of variance in subjective well-being that can be explained should increase as a function of the number of relevant predictors from all classes that are examined simultaneously. The explanatory power of some predictors (e.g., life domains) is dependent upon the outcome measure used, therefore, analyses will include two measures, one more sensitive to affect (i.e., MUNSH) and one more sensitive to life domains (i.e., SWLS).

The first step in testing the first hypothesis was to identify the significant subjective well-being predictors from each predictor class. Separate analyses were performed using step-wise multiple regression techniques for each predictor type to identify those variables that made a significant independent contribution to the prediction of subjective well-being. The probability of a Type I error was set at .05 for this and all subsequent analyses.

Environmental variables

Multiple regression of significant environmental variables with the SWLS. To identify the significant environmental predictors of subjective well-being, as measured by the SWLS, environmental variables that significantly correlated with the SWLS were subjected to a step-wise multiple regression analysis procedure to determine their independent contributions to an explanation of SWLS variance. The results of this analysis are presented in Table 2. Both hassles and uplifts emerged as significant

predictors of subjective well-being. In combination, these variables account for approximately 28% of total variance in subjective well-being scores.

Multiple regression of significant environmental variables with the MUNSH. To identify the significant environmental predictors of subjective well-being as measured by the MUNSH, environmental variables that significantly correlated with the MUNSH were subjected to step-wise multiple regression procedures to determine their independent contributions to an explanation of MUNSH variance. The results of this analysis are presented in Table 3. Both hassles and uplifts emerged as significant predictors of subjective well-being. In combination, these variables account for approximately 37% of total variance in subjective well-being scores.

Life Domains

The second class of predictors that were subjected to step-wise multiple regression procedures to identify the significant predictors of subjective well-being was life domains. The array included all domains studied to date, with the exception of self-satisfaction which seems closer to a personality resource variable than a life domain.

Multiple regression of all significant life domains with the SWLS. To identify the significant life domain predictors of subjective well-being, as measured by the SWLS, life domain variables that significantly correlated with the SWLS were subjected to step-wise multiple regression analyses procedures to determine their independent contributions to an explanation of SWLS variance. These results are presented in Table 4. Six domains emerged as significant predictors of the SWLS: appearance satisfaction,

education satisfaction, friendship satisfaction, health satisfaction, marital/partner satisfaction, and work satisfaction. In combination, these variables account for approximately 36% of total variance in subjective well-being scores.

Multiple regression of all significant life domains with the MUNSH. To identify the significant life domain predictors of subjective well-being, as measured by the MUNSH, life domain variables that significantly correlated with the MUNSH were subjected to step-wise multiple regression analyses procedures to determine their independent contribution to an explanation of MUNSH variance. These results are demonstrated in Table 5. Six domains emerged as significant predictors of subjective well-being: appearance satisfaction, education satisfaction, friendship satisfaction, leisure satisfaction, marital/partner satisfaction, and need satisfaction. In combination, these variables account for approximately 28% of the variance in subjective well-being as measured by the MUNSH.

Personality resources

Multiple regression of all significant personality resources with the SWLS. To identify the significant personality resource predictors of subjective well-being, as measured by the SWLS, personality resource variables that significantly correlated with the SWLS were subjected to step-wise multiple regression analyses procedures to determine their independent contribution to an explanation of SWLS variance. The results of this analysis are presented in Table 6. Three personality resource variables emerged as significant predictors of subjective well-being: Life Purpose, Personal Growth, and Self-

Acceptance. In combination, these variables account for approximately 39% of total variance in subjective well-being scores.

Multiple regression of all significant personality resources with the MUNSH. To identify the significant personality resource predictors of subjective well-being, as measured by the MUNSH, personality resource variables that significantly correlated with the MUNSH were subjected to step-wise multiple regression analyses procedures to determine their independent contribution to an explanation of MUNSH variance. The results of this analysis are presented in Table 7. Three personality resources variables emerged as significant predictors of subjective well-being: Life Purpose, Life Control, and Self-Acceptance. In combination, these variables account for approximately 48% of total variance in subjective well-being scores.

Personality traits

Multiple regression of all significant personality traits with the SWLS. To identify the significant personality trait predictors of subjective well-being, as measured by the SWLS, personality trait variables that significantly correlated with the SWLS were subjected to step-wise multiple regression analyses procedures to determine their independent contribution to an explanation of SWLS variance. These results are presented in Table 8. Three personality traits variables emerged as significant predictors of subjective well-being: Conscientiousness, Extraversion, and Neuroticism. In combination, these variables account for approximately 23% of total variance in subjective well-being scores.

Multiple regression of all significant personality traits with the MUNSH. To identify the significant personality trait predictors of subjective well-being, as measured by the MUNSH, personality traits variables that significantly correlated with the MUNSH were subjected to step-wise multiple regression analyses procedures to determine their independent contribution to an explanation of MUNSH variance. These results are demonstrated in Table 9. Three personality traits emerged as significant predictors of subjective well-being: Conscientiousness, Extraversion, and Neuroticism. In combination, these variables account for approximately 33% of total variance in subjective well-being scores.

Simultaneous contribution of all significant predictors on subjective well-being measures

After identifying the significant predictors of subjective well-being from each predictor class a simultaneous "block enter" multiple regression analysis of the significant predictors was carried out on both the MUNSH and the SWLS. The next step in testing hypothesis 1 was to decide the order in which the predictor classes should be entered in carrying out the analysis. Variable entry in block enter regression is typically determined by an investigator's theoretical or practical reasons for using a particular order (Hays, 1994). Conventional wisdom has it that the prediction of subjective well-being is best framed in terms of a bottom-up model. Subjective well-being, according to this approach, is an outcome of lower order variables such as environmental variables, life domains, personality resources, and personality traits. Therefore, the following order was used in the "block enter" regression analyses: environmental variables, life domains, personality

resources, and personality traits. Environmental variables were chosen first as they represent the lowest order construct in subjective well-being (Kozma, Stone, & Stones, 2000).

Life domains were chosen next as domain satisfactions are seen by many as an aggregate of all the positive uplifts and daily hassles that people experience in various life domains (Diener, Emmons, Larsen, & Griffin, 1985). Personality resources were then entered next into the equation as they mediate the influence of lower order constructs such as environmental variables and life domains on subjective well-being. Personality traits were entered into the regression analyses last as they would be considered the highest order construct of all the predictors examined, when taking a bottom-up approach. It is important to note that this procedure biases the outcome in favor of the generally accepted bottom-up approach to subjective well-being.

Multiple regression of all significant predictors with the SWLS. The first block to be entered into the prediction equation was environmental variables. In combination, these variables account for approximately 24% of the total variance in subjective well-being. Relative to past research which demonstrates that daily hassles and uplifts account for between 5 to 19% of the total variance in well-being (Kozma, Stones, & McNeil, 1991) this is a considerable increase in the predictive power of environmental variables.

The next block entered into the regression analyses was significant life domains. In total, the six domains contributed a further 17% of the total variance in subjective well-being scores. These results are generally consistent with past findings and lead one to

conclude that the larger predictor array did not make any significant contribution to the prediction of subjective well-being beyond what other researchers have achieved (Bharadwaj & Wilkening, 1977).

The third block to be entered into the regression analyses was personality resources. In combination, Life Purpose, Personal Growth, and Self-Acceptance could account for a further 7% of the total variance in SWLS scores.

The final block to be entered was personality traits. Contrary to past research (Costa & McCrae, 1980; Costa, McCrae, & Norris, 1981; Emmons & Diener, 1985; Kozma, Stones, & McNeil, 1991; McCrae & Costa, 1983), personality traits did not contribute any unique variance to an explanation of SWLS variance over and above the effects of the other predictor types. It appears that when other predictor types are included in the regression equation the predictive power of personality traits does not remain consistent. It is possible that personality traits do make an individual contribution to an explanation of SWLS variance when entered into the prediction equation in a different order (i.e., first vs. fourth). As noted before, the procedure used biases the outcomes in favor of a bottom-up approach. However, the present study is concerned only with the enhanced prediction of well-being which best lends itself to a bottom-up model of well-being.

Overall, environmental variables, life domains, personality resources, and personality traits accounted for 48% of the total variance in subjective well-being as measured by the SWLS. (Table 10)

Multiple regression of all significant predictors with the MUNSH. To test whether simultaneous examination of all predictor types can enhance prediction of subjective well-being as measured by the MUNSH, "block enter" multiple regression procedures were used on significant predictors to assess their individual contribution. Table 11 depicts the block enter regression analyses of all the predictor types on the MUNSH. Significant environmental variables made up the first entry block. In total, daily hassles and uplifts accounted for approximately 35% of the total variance in subjective well-being scores as measured by the MUNSH. As with the SWLS, environmental variables make a significantly greater contribution to the prediction of subjective well-being than was observed in previous studies (Kozma, Stones, & McNeil, 1991).

The second block of variables entered was life domains. Six domains contributed a further 8% to the prediction of subjective well-being. This amount is considerably different from results obtained with the SWLS (i.e., 17% vs 8% for the MUNSH) , a finding that may reflect theoretical differences between the MUNSH and the SWLS. Life domains would be better predictors of subjective well-being when measured by the SWLS than the MUNSH since the SWLS is based on a life domain approach that looks at well-being as an aggregation of satisfaction in various life domains.

The third block of variables entered was personality resources. The three variables that were found to be significant predictors of subjective well-being as measured by the MUNSH explained, in total, a further 13% of the variance in subjective well-being scores. The greater predictability of personality resources on the MUNSH than the SWLS

may reflect the form of measurement which can bias outcomes. In particular, the MUNSH reflects a more general conception of subjective well-being involving both affective and experiential components which may be more sensitive to the effects of personality resources than the SWLS which is a stronger measure of life domain effects.

The final block entered was personality traits. Results indicate that Conscientiousness, Extraversion, and Neuroticism combined can account for approximately 2% of the total variance in subjective well-being as measured by the MUNSH. Unlike the results found with the SWLS, personality traits make a significant unique contribution to an explanation of subjective well-being as measured by the MUNSH. In sum, environmental variables, life domains, personality resources, and personality traits accounted for 59% of the total variance in subjective well-being as measured by the MUNSH.

These results provide only partial support for the first hypothesis. Each predictor class made significant independent contributions to an explanation of subjective well-being variance on the MUNSH. On the other hand, only environmental variables, life domains, and personality resources make a significant independent contribution to an explanation of subjective well-being variance on the SWLS.

Evaluation of Hypothesis 2

The second hypothesis states that a bi-directional path model will provide a better fit of the predictor/subjective well-being relationship than either a bottom-up or a top-down model. Because the predictor array generated from each predictor class did not take

into account intercorrelations among variables across classes, all significant predictors from each class were entered into one step-wise regression analysis to predict first SWLS scores and then MUNSH scores. Significant independent predictors of the SWLS that added more than one percent to the explained variance consisted of Life Purpose, education satisfaction, daily hassles, appearance satisfaction, marital satisfaction, and Self-Acceptance (i.e., $R^2 = 0.48$). The significant predictor array for the MUNSH was Life Purpose, daily hassles, education satisfaction, Neuroticism, Life Control, and marital satisfaction and Self-Acceptance (i.e., $R^2 = 0.59$). This combined predictor array, except for appearance satisfaction, together with the two dependent variables, SWLS and MUNSH served as the basis for the three structural equation models: bottom-up, top-down, and bi-directional models.

In order to ensure proper matrix identification for the bi-directional path model, independent predictors were necessary for education satisfaction and marital satisfaction. The objective counterparts for these variables, years of education, and marital status (married), served this purpose for all models. Since a latent variable based on multiple measures of the same construct can provide a better estimate of such a construct than a single measure (Kozma et al., 2000), the SWLS and MUNSH were used to obtain a latent subjective well-being variable. All predictor/subjective well-being relationships were established using this latent variable.

Before proceeding with the analysis, all measures were reduced to a common metric by computing an obtained score/possible score index. The procedure was

necessary because the base of some measures was over eight times that of others.

A distribution-free estimation procedure (Adf) was used to evaluate structure and three criteria were employed to assess fit. Chi-Square is a general index of fit that measures how accurately a model reproduces the observed correlations between all variables. The lower the Chi-Square value is, the better the obtained structure fits the data. A non-significant Chi-Square represents an excellent fit. The Comparative Fit Index reflects the improvement of Chi-Square goodness of fit over a null model (a model postulating no relationship between any of the variables). The Comparative Fit Index is normalized to fall between 0 and 1, and any value over .90 represents an acceptable fit. The Root Mean Square Error is the third fit index used to evaluate fit. The Root Mean Square Error is calculated as the square root of the average squared residual covariance matrix. This number, therefore, reflects the degree to which the model does not account for the variance in the variables. The smaller the Root Mean Square Error, the better is the model. Root Mean Square Error values under .05 are acceptable.

Fit indices, path coefficients and amount of variance explained by paths for bi-directional, top-down, and bottom-up models are presented in Figures 1 to 3. It will be noted that appearance satisfaction has been dropped from these figures. This step was necessary because its inclusion reduced all fit indices in all models and added nothing to the amount of explained subjective well-being variance in bottom-up and bi-directional models.

Both bi-directional and top-down models provide an adequate fit of the data, with

all three fit indices falling within acceptable limits. Comparatively, the bi-directional model is superior to the top-down model as evidenced by the lower Chi-Square value, higher Comparative Fit Index, and the lower Root Mean Square Error. Since the interest is in the model that best fits the data a detailed description of findings for specific relationships among variables will be limited to the bi-directional path model.

Figure 1 makes it clear that predictors differ in the direction and size of influence in this model, although the predominant pattern is bi-directional. Moreover, for five of the seven predictors, top-down effects are either equal to, or greater than, bottom up effects. The two exceptions are hassles and marital satisfaction. For these two variables only bottom up paths are statistically significant.

Interestingly, significant bi-directional effects are present for all resource variables, for hassles, and for Neuroticism. Therefore, not only does the model indicate top-down and bottom-up effects for variables but many of the effects are bi-directional themselves.

Few significant effects were obtained between the more abstract variables: Neuroticism, Life Control, Life Purpose, and Self-Acceptance and environmental and domain variables such as hassles, marital satisfaction, and education satisfaction. The only significant paths among these variables are from Neuroticism to Life Control and from Neuroticism to hassles.

The only other interesting path is the one from marital status to marital satisfaction. In the general population this path is positive (Kozma et al., 2000). With the

current population, the effect is negative.

Discussion

This thesis examined two issues with respect to subjective well-being. These issues were: a) enhanced prediction of subjective well-being and b) the relationship between subjective well-being and its predictors.

Enhanced prediction of Subjective Well-Being

Hypothesis 1, that the amount of explained variance in subjective well-being should increase as a function of the number of predictor classes was partially confirmed. Each predictor type contributed significant amounts of unique variance to the explanation of subjective well-being for the MUNSH and all classes, except for personality traits, contributed a significant amount of unique variance to the explanation of subjective well-being for the SWLS. It would appear that to maximize the explanatory power of subjective well-being predictors it is necessary to include the best predictors from all predictor classes.

What is perhaps more surprising is that adding to the predictor array within predictor classes did little to enhance predictor power. For instance, the far larger set of domain satisfactions and the larger array of personality resource variables than those employed in the Kozma et al. (2000) study did little to increase the amount of explained variance in subjective well-being scores. It would seem that there is an upper limit to the explanatory power of each predictor class. While variables in these classes may vary in their potency to predict subjective well-being from study to study, the class as a whole has a limit.

Variables that made unique contributions to the variance of subjective well-being in the present study seem to reflect the characteristics of the population studied, especially with regard to significant domain satisfaction predictors. Our population consisted of university students. For such a group, satisfaction with education and even with personal appearance would be more important than they would be for a more general, older, population (Blais, Vallerand, et al., 1990; Michalos, 1985). It is not surprising, therefore, that these two variables were important predictors of subjective well-being, while more traditional ones such as housing satisfaction and health (Kozma & Stones, 1983) contributed little to the explanation of subjective well-being variance.

Differences in significant predictor arrays and their respective contributions to an explanation of subjective well-being variance also appear to be influenced by the outcome measures used. The SWLS appears to be more sensitive to the effects of life domains (i.e., 17% explained variance vs. 8% for the MUNSH), whereas the MUNSH is better predicted by environmental variables (i.e., 35% explained variance vs. 24% for the SWLS), although four of the seven predictors in the final array are common to both dependent measures. Since the MUNSH contains both short- and long-term affect components, it may be more sensitive to the effects of environmental variables such as daily hassles and uplifts that act on subjective well-being over shorter periods of time (Chamberlain & Zika, 1982; Kanner, Coyne, Schaefer, & Lazarus, 1981). The greater sensitivity of the SWLS to domain satisfactions may simply be due to the fact that the SWLS is primarily a general domain satisfaction scale.

Another difference in the predictor array for the two subjective well-being measures was on personality resource variables. Although all three resource variables making up the final predictor array contributed to an explanation of MUNSH variance, only Life Purpose and Self-Acceptance contributed to SWLS variance. While the reason for the greater sensitivity of the MUNSH to environmental and resource variables is not entirely clear, these measures do account for the greater amount of explained MUNSH variance (i.e., 59%) over SWLS variance (i.e., 48%). One possibility for this effect is that the MUNSH is a better general measure of subjective well-being than the SWLS. Such an interpretation gains support from the somewhat higher path coefficient of the MUNSH from the subjective well-being latent variable.

The final difference between the two subjective well-being measures was on personality trait variables. In the final predictor array, Neuroticism contributed to an explanation of subjective well-being variance on the MUNSH but not on the SWLS. One possible explanation for this effect is that personality traits, such as Neuroticism, reflect emotional tendencies (Emmons & Diener, 1985) to which the MUNSH, with its strong affective component, may be more sensitive than the SWLS.

Relationship between Subjective Well-Being and predictors

The current findings on hypothesis 2 both support and extend prior findings reported by Kozma et al. (2000). In both studies, the bi-directional path model provided the best fit of the data; in both studies the path coefficients between subjective well-being and resource variables showed larger top-down than bottom-up effects; and in both

studies the relationship of hassles to subjective well-being was bottom up. Unlike the Kozma, et al. (2000) study, the path coefficients between some of the domain satisfactions (i.e., marital satisfaction) and subjective well-being demonstrated larger bottom-up than top-down effects. It appears that university students' marital satisfaction is more a product of environmental variables such as hassles and uplifts (Kozma, 1998) than top-down effects from a higher order subjective well-being factor.

This finding of a bottom-up effect for university students is consistent with results reported by Lance et al. (1989) for university professors. However, the results are inconsistent with findings reported by Kozma et al. (2000) for a more general sample of community subjects ranging in age from 20 to 80 years in which the effects were bottom-up. What is unclear is whether individuals pursuing higher education are more influenced by marital difficulties than those in the general population. It is possible that the demands of higher learning place an excessive strain on the marital partnership.

What is most interesting about the current data set is that the addition of the trait variable, Neuroticism, produced both top-down and bottom-up effects. These findings suggest that the relationship between subjective well-being and its more abstract predictors is bi-directional. Thus, not only do personality resources and traits influence current well-being, but current well-being seems to effect how personality resources and personality traits are evaluated. It should be pointed out, however, that Neuroticism has both direct and indirect influences on subjective well-being. A small part (i.e., 1.96%) of the trait-like characteristic of subjective well-being seems to be due directly to an

underlying personality trait, while another part (i.e., .26 x .20 or 5.20%) seems to be due to its indirect effects through daily hassles. Thus, as much as 7.16 % in subjective well-being variance may be due to Neuroticism.

Interestingly, the effects of hassles in both the current investigation and in that of Kozma et al. (2000) are bottom-up. These findings would suggest that the optimistic outlook that seems to characterize people high in subjective well-being is not very effective in moderating experiences if they are sufficiently negative. A possible explanation for this effect is the high impact that negative experiences have on well-being (Kozma et al., 1992).

One surprise arising from the path model is the amount of explained variance in the subjective well-being construct. Seventy-four percent of the subjective well-being construct is explained by predictors (i.e., bottom-up), despite the large top-down effects for most of the predictors. This value is similar to the one reported by Kozma et al. (2000) for their phase 3 data from a community sample of adult subjects. However, 43% of subjective well-being variance in that study was due to phase 2 subjective well-being. Since only same-phase variables were used in the current investigation, much of the bottom-up effects from domain satisfactions may, in fact, be due to prior levels of subjective well-being operating through domains. Without longitudinal data, bottom-up effects are difficult to evaluate even in a bi-directional path model.

A second surprise is the negative path coefficient between marital status, married, and marital satisfaction. In non-student adult samples this path is normally positive. A

possible explanation for this difference is that there are more hassles in the first four years of marriage than later on (Kozma, 1998). Many married students may thus be dissatisfied with their married status.

Limitations and Future Avenues of Research

One limitation of the present study has to do with the fact that this study concentrated only on university students. One avenue of future research is to examine the relationship between subjective well-being and the predictor array used here in non-university and elderly samples. Such a study could be used to confirm the bottom-up effects from Neuroticism to subjective well-being.

Another limitation of this study is that participants were tested both individually and in groups. In the future, all participants should be provided with uniform testing conditions to eliminate the effects that settings may have on people's judgments about subjective well-being.

Finally, studies of subjective well-being should involve multiple phases to evaluate more effectively top-down and bottom-up effects. Since prior subjective well-being has been found to be the most important predictor of current subjective well-being in other studies (Kozma et al., 2000) and since prior subjective well-being seems to moderate bottom-up effects from domain satisfactions (Kozma et al., 2000), bottom-up effects from such domains may be inflated in single-phase studies.

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Table 1a

Descriptive Statistics of Study Variables

VARIABLE	MEAN	STANDARD DEVIATION	n	RANGE	# OF ITEMS
1. AGE					
Age	21.31	3.76	277	(18-48)	1
2. EDUCATION					
Educate	14.13	1.74	275	(1-19)	1
3. SATISFACTION AT EXACT MOMENT					
Feelnow	4.80	1.35	277	(1-7)	1
4.WORK SATISFACTION					
Worksat	4.43	1.39	274	(1-7)	1
5. EDUCATION SATISFACTION					
Educsat	5.15	1.17	277	(1-7)	1
6. FAMILY SATISFACTION					
Famsatis	5.77	1.27	277	(1-7)	1

Table 1a continued

Descriptive Statistics of Study Variables

VARIABLE	MEAN	STANDARD DEVIATION	n	RANGE	# OF ITEMS
7. MARITAL/PARTNER SATISFACTION					
Marsat	4.98	1.85	267	(1-7)	1
8. FRIENDSHIP SATISFACTION					
Frendsat	5.70	1.16	277	(1-7)	1
9. PHYSICAL ACTIVITY SATISFACTION					
Activsat	4.47	1.53	277	(1-7)	1
10. LEISURE SATISFACTION					
Lesresat	4.90	1.29	276	(1-7)	1
11. TRANSPORTATION SATISFACTION					
Transsat	4.55	1.50	277	(1-7)	1
12. HEALTH SATISFACTION					
Helthsat	5.29	1.31	277	(1-7)	1
13. HOUSING SATISFACTION					
Housesat	5.31	1.24	277	(1-7)	1

Table 1a continued

Descriptive Statistics of Study Variables

VARIABLE	MEAN	STANDARD DEVIATION	n	RANGE	# OF ITEMS
14. FINANCIAL SATISFACTION					
Finansat	4.09	1.72	277	(1-7)	1
15. SPIRITUAL/RELIGIOUS SATISFACTION					
Religsat	4.75	1.35	275	(1-7)	1
16. SELF SATISFACTION/SELF-ESTEEM					
Selfsat	4.96	1.42	277	(1-7)	1
17. BIOLOGICAL NEED SATISFACTION					
Needsat	5.39	1.10	276	(1-7)	1
18. PHYSICAL APPEARANCE SATISFACTION					
Apearsat	4.81	1.39	277	(1-7)	1
19. SHORT-TERM POSITIVE AFFECT (MUNSH)					
Shortpos	8.23	2.53	266	(0-10)	5
20. SHORT-TERM NEGATIVE AFFECT (MUNSH)					
Shortneg	5.63	2.91	276	(0-10)	5

Table 1a continued

Descriptive Statistics of Study Variables

VARIABLE	MEAN	STANDARD DEVIATION	n	RANGE	# OF ITEMS
21. LONG-TERM POSITIVE EXPERIENTIAL (MUNSH)					
Longpos	10.17	3.55	275	(0-14)	7
22. LONG-TERM NEGATIVE EXPERIENTIAL (MUNSH)					
Longneg	3.17	3.23	276	(0-14)	7
23.MEMORIAL UNIVERSITY OF NEWFOUNDLAND SCALE OF HAPPINESS					
Munshtot	9.72	9.22	264	(-20-24)	24
24. SATISFACTION WITH LIFE SCALE					
Lsattot	23.37	6.18	276	(5-35)	5
25. LIFE ATTITUDE PROFILE-LIFE PURPOSE					
Lifepurp	10.81	3.86	274	(0-16)	8
26. LIFE ATTITUDE PROFILE-LIFE CONTROL					
Lifecont	10.45	1.99	276	(1-12)	6
27. REVISED HASSLES AND UPLIFTS SCALE-TOTAL HASSLES					
Hasletot	22.82	5.66	277	(10-39)	10

Table 1a continued

Descriptive Statistics of Study Variables

VARIABLE	MEAN	STANDARD DEVIATION	n	RANGE	# OF ITEMS
28. REVISED HASSLES AND UPLIFTS SCALE-TOTAL UPLIFTS					
Upliftot	32.74	5.62	274	(18-46)	12
29. NEO-FFI SCALE-AGREEABLENESS					
Neoagree	29.66	6.25	270	(17-46)	12
30. NEO-FFI SCALE-CONSCIENTIOUSNESS					
Neoconsc	30.10	5.52	274	(14-48)	12
31. NEO-FFI SCALE-EXTRAVERSION					
Neoextra	30.25	5.33	270	(14-47)	12
32. NEO-FFI SCALE-NEUROTICISM					
Neoneuro	22.39	7.31	276	(4-44)	12
33. NEO-FFI SCALE-OPENNESS TO EXPERIENCE					
Neoopen	27.10	5.85	270	(14-44)	12
34. SCALES OF PSYCHOLOGICAL WELL-BEING-AUTONOMY					
Autonomy	49.72	6.09	248	(33-69)	14

Table 1a continued

Descriptive Statistics of Study Variables

VARIABLE	MEAN	STANDARD DEVIATION	n	RANGE	# OF ITEMS
35. SCALES OF PSYCHOLOGICAL WELL-BEING-ENVIRONMENTAL MASTERY					
Enviroma	56.86	7.58	247	(29-77)	14
36. SCALES OF PSYCHOLOGICAL WELL-BEING-PERSONAL GROWTH					
Pgrowth	55.87	5.76	253	(39-81)	14
37. SCALES OF PSYCHOLOGICAL WELL-BEING-POSITIVE RELATIONS WITH OTHERS					
Posrelot	51.22	7.16	250	(28-70)	14
38. SCALES OF PSYCHOLOGICAL WELL-BEING-PURPOSE IN LIFE					
Purplife	55.36	7.85	250	(37-73)	14
39. SCALES OF PSYCHOLOGICAL WELL-BEING-SELF-ACCEPTANCE					
Selfacpt	55.10	8.89	250	(26-74)	14

Table 1b

Frequency Statistics of Study Variables

Variable	Percent	Frequency	Total Cases
1. GENDER			277
Male	32.9%	91	
Female	67.1%	186	
2. INCOME			277
0-$11, 000	79.1%	219	
$11,000-$20,000	12.3%	34	
$21,000-$30,000	1.8%	5	
$31,000-$40,000	1.4%	4	
$41,000-$50,000	1.8%	5	
$51,000-$60,000	.7%	2	
$61,000-$70,000	.7%	2	
Missing	2.2%	6	
3. LOCATION			277
Winnipeg, Manitoba	15.5%	43	
St.John's, Newfoundland	84.5%	234	

Table 1b continued

Frequency Statistics of Study Variables

Variable	Percent	Frequency	Total Cases
4. MARITAL STATUS			277
Married	4.3%	12	
Cohabiting	10.1%	28	
Single	83.4%	231	
Widowed	.7%	2	
Separated	.4%	1	
Divorced	1.1%	3	

Table 2

Summary of Step-Wise Multiple Regression Analysis for Environmental Variables with Satisfaction with Life Scale

Variable	B	SE B	β
Step 1			
HASLETOT	-.52	.057	-.48
Step 2			
HASLETOT	-.510	.055	-.47
UPLIFTOT	.255	.056	.23

Note. R^2=.23 for Step 1; change in R^2=.05 for Step 2.

all $p<.05$

Table 3

Summary of Step-Wise Multiple Regression Analysis for Environmental Variables with Memorial University of Newfoundland Scale of Happiness

Variable	B	SE B	β
Step 1			
HASLETOT	-.915	.083	-.56
Step 2			
HASLETOT	-.893	.080	-.55
UPLIFTOT	.402	.080	.25

Note. R^2=.31 for Step 1; change in R^2=.06 for Step 2.

all $p<.05$

Table 4

Summary of Step-Wise Multiple Regression Analysis for Life Domains with Satisfaction with Life Scale

Variable	B	SE B	β
Step 1			
APEARSAT	2.07	.241	.47
Step 2			
APEARSAT	1.69	.246	.38
EDUCSAT	1.38	.299	.26
Step 3			
APEARSAT	1.53	.242	.35
EDUCSAT	1.22	.293	.23
MARSAT	.720	.177	.21
Step 4			
APEARSAT	1.46	.239	.33
EDUCSAT	1.06	.291	.20
FRENDSAT	.926	.274	.18
MARSAT	.666	.175	.20

Table 4 continued

Summary of Step-Wise Multiple Regression Analysis for Life Domains with Satisfaction with Life Scale

Variable	B	SE B	β
Step 5			
APEARSAT	1.41	.238	.32
EDUCSAT	.861	.302	.16
FRENDSAT	.944	.272	.18
MARSAT	.621	.174	.18
WORKSAT	.541	.237	.12
Step 6			
APEARSAT	1.31	.241	.30
EDUCSAT	.739	.306	.14
FRENDSAT	.910	.271	.17
HELTHSAT	.533	.259	.11
MARSAT	.590	.174	.18
WORKSAT	.489	.237	.11

Note. R^2=.22 for Step 1; change in R^2=.06 for Step 2; change in R^2= .04 for Step 3; change in R^2= .02 for Step 4; change in R^2=.01 for Step 5; change in R^2=.01 for Step 6.

all $p<.05$

Table 5

Summary of Step-Wise Multiple Regression Analysis for Life Domains with Memorial University of Newfoundland Scale of Happiness

Variable	B	SE B	β
Step 1			
APEARSAT	2.76	.392	.41
Step 2			
APEARSAT	2.29	.400	.33
EDUCSAT	1.92	.486	.23
Step 3			
APEARSAT	2.13	.396	.31
EDUCSAT	1.69	.482	.20
FRENDSAT	1.42	.443	.18
Step 4			
APEARSAT	2.00	.393	.30
EDUCSAT	1.51	.482	.18
FRENDSAT	1.29	.440	.17
MARSAT	.760	.284	.15

Step 5 continued

Summary of Step-Wise Multiple Regression Analysis for Life Domains with Memorial University of Newfoundland Scale of Happiness

Variable	B	SE B	β
Step 5			
APEARSAT	1.83	.399	.27
EDUCSAT	1.49	.478	.18
FRENDSAT	1.14	.443	.15
LESRESAT	.838	.399	.12
MARSAT	.824	.284	.16
Step 6			
APEARSAT	1.71	.402	.25
EDUCSAT	1.36	.480	.17
FRENDSAT	1.12	.440	.14
LESRESAT	.788	.397	.11
MARSAT	.749	.285	.15
NEEDSAT	.946	.478	.11

Note. R^2=.16 for Step 1; change in R^2=.05 for Step 2; change in R^2=.03 for Step 3; change in R^2=.02 for Step 4; change in R^2=.01 for Step 5; change in R^2=.01 for Step 6.

all $p<.05$

Table 6

Summary of Step-Wise Multiple Regression Analysis for Personality Resources with Satisfaction with Life Scale

Variable	B	SE B	β
Step 1			
LIFEPURP	.919	.082	.58
Step 2			
LIFEPURP	.748	.091	.48
SELFACPT	.162	.041	.23
Step 3			
LIFEPURP	.743	.090	.47
PGROWTH	-.135	.066	-.11
SELFACPT	.195	.044	.28

Note. R^2=.34 for Step 1; change in R^2=.04 for Step 2; change in R^2=.01 for Step 3.

all $p<.05$

Table 7

Summary of Step-Wise Multiple Regression Analysis for Personality Resources with Memorial University of Newfoundland Scale of Happiness

Variable	B	SE B	β
Step 1			
LIFEPURP	1.52	.123	.63
Step 2			
LIFEPURP	1.20	.132	.50
SELFACPT	.307	.059	.28
Step 3			
LIFECONT	.806	.236	.17
LIFEPURP	1.11	.132	.46
SELFACPT	.266	.059	.25

Note. R^2=.40 for Step 1; change in R^2=.06 for Step 2; change in R2.= 02 for Step 3.

all $p<.05$

Table 8

Summary of Step-Wise Multiple Regression Analysis for Personality Traits with Satisfaction with Life Scale

Variable	B	SE B	β
Step 1			
NEONEURO	-.361	.048	-.42
Step 2			
NEOCONSC	.234	.063	.21
NEONEURO	-.339	.047	-.40
Step 3			
NEOCONSC	.208	.063	.18
NEOEXTRA	.160	.068	.14
NEONEURO	-.310	.049	-.36

Note. R^2=.18 for Step 1; change in R^2=.04 for Step 2; change in R^2=.01 for Step 3.

all $p<.05$

Table 9

Summary of Step-Wise Multiple Regression Analysis for Personality Traits with Memorial University of Newfoundland Scale of Happiness

Variable	B	SE B	β
Step 1			
NEONEURO	-.699	.068	-.55
Step 2			
NEOEXTRA	.284	.098	.16
NEONEURO	-.640	.070	-.50
Step 3			
NEOCONSC	.221	.090	.13
NEOEXTRA	.249	.098	.14
NEONEURO	-.625	.070	-.49

Note. R^2=.30 for Step 1; change in R^2=.02 for Step 2; change in R^2=.01 for Step 3.

all $p<.05$

Table 10

Summary of Block Enter Multiple Regression Analysis for Environmental Variables, Life Domains, Personality Resources, and Personality Traits with Satisfaction with Life Scale

Variable	B	SE B	β
Step 1			
HASLETOT	-.506	.064	-.45
UPLIFTOT	.216	.064	.19
Step 2			
APEARSAT	.957	.271	.21
EDUCSAT	.809	.327	.15
FRENDSAT	.615	.297	.11
HASLETOT	-.297	.063	-.27
HELTHSAT	.387	.275	.080
MARSAT	.474	.182	.14
UPLIFTOT	.096	.063	.09
WORKSAT	.379	.264	.08
Step 3			
APEARSAT	.618	.261	.14
EDUCSAT	.719	.307	.13

Table 10 continued

Summary of Block Enter Multiple Regression Analysis for Environmental Variables, Life Domains, Personality Resources, and Personality Traits with Satisfaction with Life Scale

Variable	B	SE B	β
Step 3			
FRENDSAT	.325	.283	.06
HASLETOT	-.18	.063	-.16
HELTHSAT	.106	.262	.02
LIFEPURP	.465	.100	.29
MARSAT	.408	.171	.12
PGROWTH	-.086	.068	-.07
SELFACPT	.108	.044	.15
UPLIFTOT	-.001	.060	-.001
WORKSAT	.260	.250	.06
Step 4			
APEARSAT	.590	.263	.13
NEOCONSC	-.015	.059	-.01
EDUCSAT	.696	.317	.13
NEOEXTRA	.022	.064	.02

Table 10 continued

Summary of Block Enter Multiple Regression Analysis for Environmental Variables, Life Domains, Personality Resources, and Personality Traits with Satisfaction with Life Scale

Variable	B	SE B	β
Step 4			
FRENDSAT	.306	.285	.06
HASLETOT	-.145	.068	-.13
HELTHSAT	.129	.264	.03
LIFEPURP	.441	.102	.28
MARSAT	.426	.172	.13
NEONEURO	-.066	.051	-.08
PGROWTH	-.089	.069	-.07
SELFACPT	.103	.045	.15
UPLIFTOT	-.011	.068	-.13
WORKSAT	.258	.251	.06

Note. R^2=.24 for Step 1; change in R^2=.17 for Step 2; change in R^2=.07 for Step 3; change in R^2=.00 for Step 4.

all $p<.05$

Table 11

Summary of Block Enter Multiple Regression Analysis for Environmental Variables, Life Domains, Personality Resources, and Personality Traits with Memorial University of Newfoundland Scale of Happiness

Variable	B	SE B	β
Step 1			
HASLETOT	-.912	.090	-.55
UPLIFTOT	.362	.090	.22
Step 2			
APEARSAT	.610	.419	.09
EDUCSAT	1.11	.465	.13
FRENDSAT	.687	.435	.09
HASLETOT	-.721	.094	-.43
LESRESAT	.276	.392	.04
MARSAT	.588	.273	.12
NEEDSAT	1.07	.464	.12
UPLIFTOT	.245	.091	.15
Step 3			
APEARSAT	.071	.373	.01
EDUCSAT	.873	.409	.10

Table 11 continued

Summary of Block Enter Multiple Regression Analysis for Environmental Variables, Life Domains, Personality Resources, and Personality Traits with Memorial University of Newfoundland Scale of Happiness

Variable	B	SE B	β
Step 3			
FRENDSAT	.287	.384	.04
HASLETOT	-.463	.089	-.28
LESRESAT	.114	.345	.02
LIFECONT	.759	.222	.17
LIFEPURP	.695	.139	.29
MARSAT	.509	.239	.10
NEEDSAT	.389	.417	.04
SELFACPT	.182	.059	.17
UPLIFTOT	.039	.087	.02
Step 4			
APEARSAT	-.040	.369	-.00
NEOCONSC	-.081	.082	-.05
EDUCSAT	.856	.416	.10
NEOEXTRA	.054	.089	.03
FRENDSAT	.241	.378	.03
HASLETOT	-.355	.094	-.21
LIFECONT	.671	.219	.15

Table 11 continued

Summary of Block Enter Multiple Regression Analysis for Environmental Variables, Life Domains, Personality Resources, and Personality Traits with Memorial University of Newfoundland Scale of Happiness

Variable	B	SE B	β
Step 4			
LIFEPURP	.644	.139	.27
LESRESAT	.178	.347	.02
MARSAT	.580	.236	.12
NEEDSAT	.366	.415	.04
NEONEURO	-.217	.071	-.17
SELFACPT	.171	.059	.16
UPLIFTOT	.008	.088	-.004

Note. R^2=.35 for Step 1; change in R^2=.08 for Step 2; change in R^2=.13 for Step 3; change in R^2=.02 for Step 4.

all $p<.05$

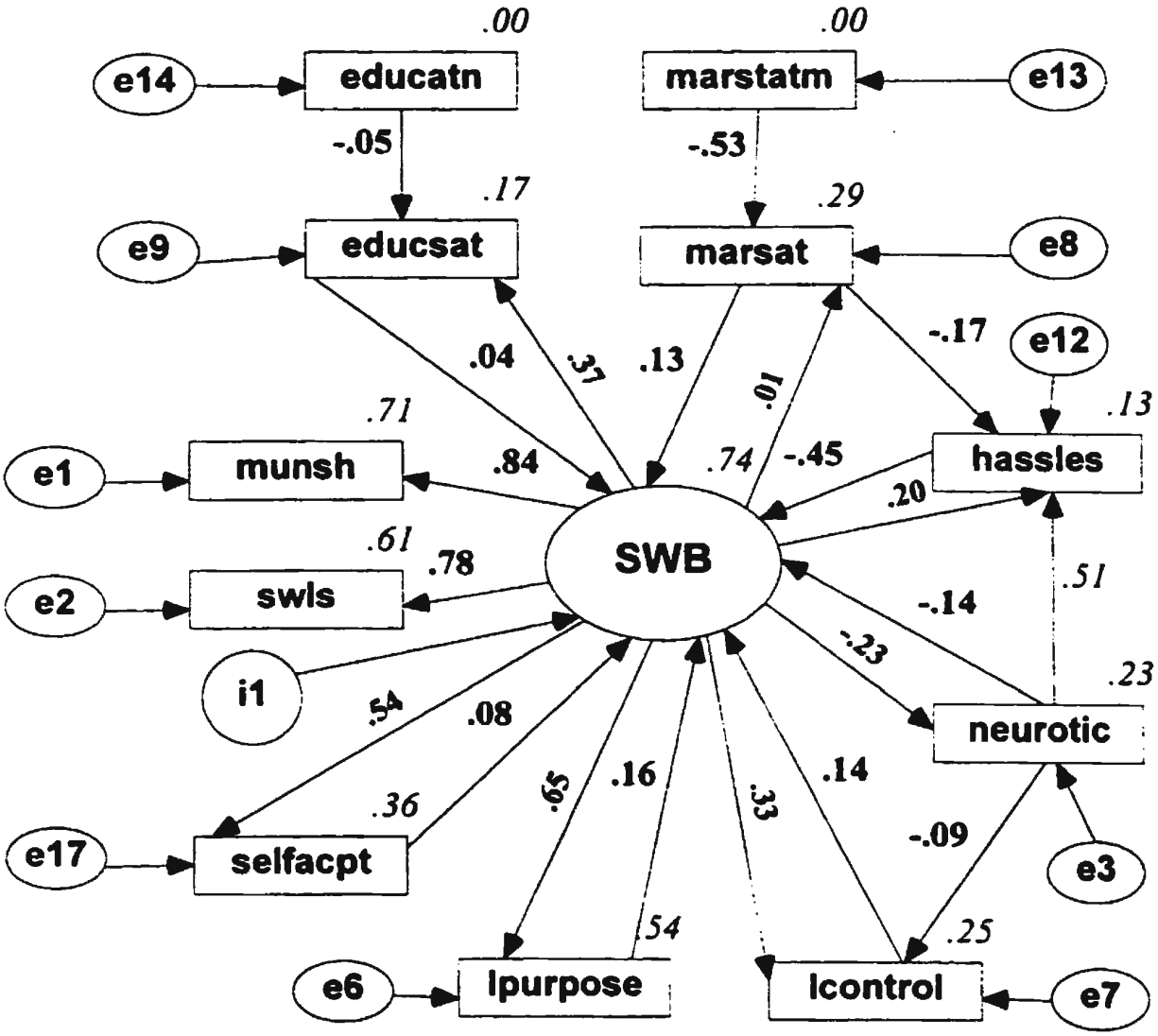

Figure 1. Bi-directional Path Model of SWB
Chi-square= 27.739; df= 34; p= .767; CFI= 1.000; RMSEA= .000

educatn=years of education; educsat=satisfaction with education; marstatm=marital status, married; marsat=satisfaction with marital status; hassles=daily hassles; munsh=MUNSH; swls=SWLS; neurotic=neuroticism; lcontrol= Life Control; lpurpose=Life Purpose; selfacpt=Self Acceptance; values in bold=standardized path coefficients; values in bold oblique=top-down path coefficients; values in italics=amount of explained variance; e=error

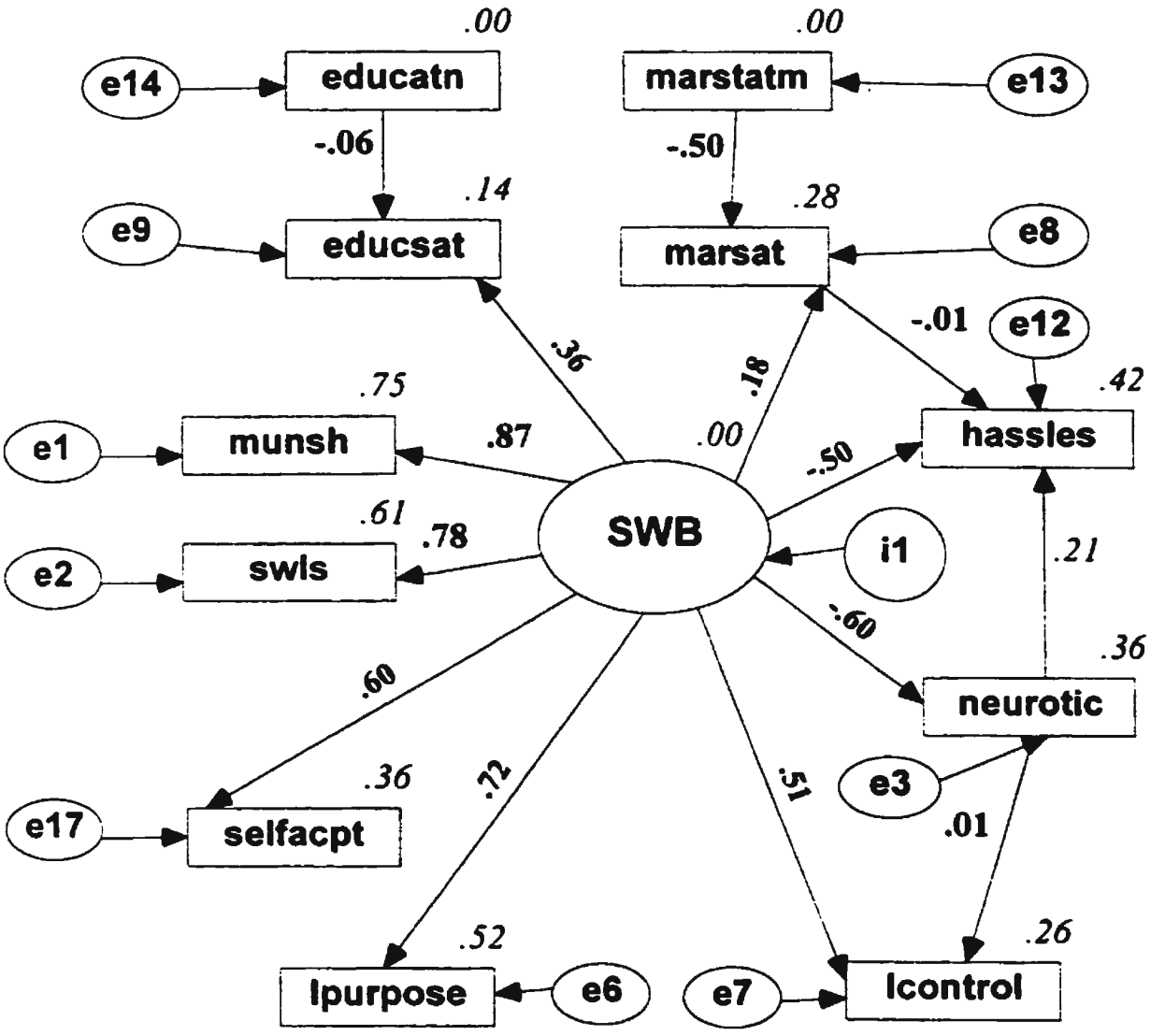

Figure 2. Top-down Path Model of SWB
Chi-square= 43.375; df= 41; p= .370; CFI= .987; RMSEA= .014

educatn=years of education; educsat=satisfaction with education; marstatm=marital status, married; marsat=satisfaction with marital status; hassles=daily hassles; munsh=MUNSH; swls=SWLS; neurotic=neuroticism; lcontrol= Life Control; lpurpose=Life Purpose; selfacpt=Self Acceptance; values in bold=standardized path coefficients; values in bold oblique=top-down path coefficients; values in italics=amount of explained variance; e=error

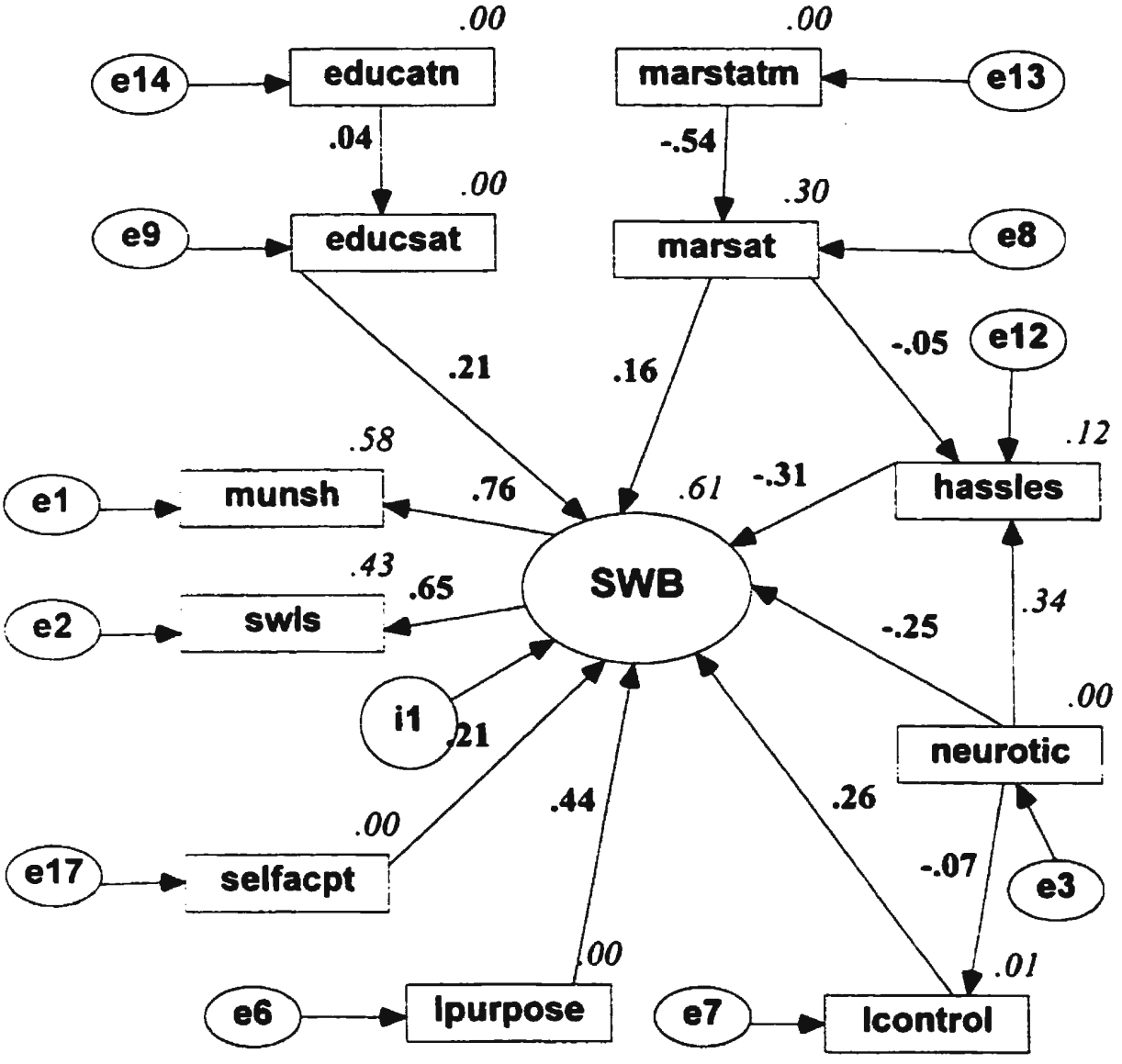

Figure 3. Bottom-up Path Model of SWB
Chi-square= 135.116; df= 41; p= .000; CFI= .468; RMSEA= .091

educatn=years of education; educsat=satisfaction with education; marstatm=marital status, married; marsat=satisfaction with marital status; hassles=daily hassles; munsh=MUNSH; swls=SWLS; neurotic=neuroticism; lcontrol= Life Control; lpurpose=Life Purpose; selfacpt=Self Acceptance; values in bold=standardized path coefficients; values in italics=amount of explained variance; e=error

Appendix A

Demographic Information

Demographic Information

For this study we need to know some information about you as an individual. All responses are completely confidential!

1. Gender: Please circle male or female

2. Age ____

3. Marital status: ____ Married ____ Cohabiting ____ Single ____ Widowed ____ Separated ____ Divorced

4. Total years of education completed (count 1 year for each of grades 1 through 12, and 1 year for each complete year of university/community college, or other degree credits)

____

5. Please indicate your annual pre-tax income. Check where appropriate.

___ 0-$10,000	____ $41,000-$50,000	____ $81,000-$90,000
___ $11,000-$20,000	____ $51,000-$60,000	____ $91,000-$100,000
___ $21,000-$30,000	____ $61,000-$70,000	____ $101,000-$120,000
___ $31,000-$40,000	____ $71,000-$80,000	____ >120,000

6. Using a seven point scale, tell us how you feel at this exact moment?

1= extremely dissatisfied 2= dissatisfied 3= slightly dissatisfied

4= neither satisfied or dissatisfied 5= slightly satisfied 6= satisfied 7= extremely satisfied _____

Appendix B

Life Attitude Profile

Life Attitude Profile

Please continue with the following questions concerning life attitude:

1. My life is running over with good things.	Y	N	?
2. My life is in my hands and I am in control.	Y	N	?
3. Life to me seems very exciting.	Y	N	?
4. I determine what happens in my life.	Y	N	?
5. Basically, I am living the kind of life I want to live.	Y	N	?
6. I believe I am absolutely free to make all my life choices.	Y	N	?
7. I get a great thrill out of just being alive.	Y	N	?
8. My accomplishments in life are largely determined by my own efforts.	Y	N	?
9. Every day is constantly new and different.	Y	N	?
10. I regard the opportunity to direct my life very important.	Y	N	?
11. I have discovered a satisfying life purpose.	Y	N	?
12. It is possible for me to live my life in terms of what I want to do.	Y	N	?
13. In thinking of my life, I see a reason for existing.	Y	N	?
14. The meaning of life is evident in the world around us.	Y	N	?

Appendix C

Memorial University of Newfoundland Scale of Happiness

Memorial University of Newfoundland Scale of Happiness

The following questions are concerned with several aspects of well-being. Whenever a statement is true for you, please circle the "Y" (yes); if it is untrue for you, circle the "N" (no); if you can't decide about a question, circle the "?" (don't know).

In the past month have you ever felt:

1. On top of the world? Y N ?
2. In high spirits? Y N ?
3. Particularly content with your life? Y N ?
4. Lucky? Y N ?
5. Very lonely or remote from people? Y N ?
6. Bored? Y N ?
7. Depressed or very unhappy? Y N ?
8. Flustered because you didn't know what to do? Y N ?
9. Bitter about the way your life has turned out? Y N ?
10. Generally satisfied with the way your life has turned out? Y N ?

The next set of questions have to do with more general life experiences. As in the preceding set, circle the "Y" for a "yes" answer, the "N" for a "no" and the "?" for "don't know".

11. This is the dreariest time of my life. Y N ?
12. I am just as happy as when I was younger. Y N ?
13. Most of the things I do are boring and monotonous. Y N ?

14. The things I do are as interesting to me as they ever were. Y N ?

15. As I look back on my life I am fairly well satisfied. Y N ?

16. Things keep getting worse as I get older. Y N ?

17. Do you often feel lonely? Y N ?

18. Little things bother me more this year? Y N ?

19. Do you like living in this city (town, etc.)? Y N ?

20. I sometimes feel that life isn't worth living. Y N ?

21. I am as happy now as I was when I was younger. Y N ?

22. Life is hard for me most of the time. Y N ?

23. Are you satisfied with your life today? Y N ?

24. My health is at least as good as most people's my age. Y N ?

Appendix D

Measures of Life Domain Satisfactions

Measures of Life Domain Satisfactions

In this questionnaire we are interested in how satisfied you are with different parts of your life. Using the seven point scale, rate how satisfied you are with the various life domains. For example, if you are extremely satisfied with a domain, write the number "7" next to it. There are no right or wrong answers. 1= extremely dissatisfied 2= dissatisfied 3= slightly dissatisfied 4= neither satisfied or dissatisfied 5= slightly satisfied 6= satisfied 7= extremely satisfied

	Satisfaction
Work	_____
Education	_____
Family	_____
Marital/Partner	_____
Friendship	_____
Physical Activity	_____
Leisure	_____
Transportation	_____
Health	_____
Housing	_____
Finances	_____
Spiritual/Religious	_____

Self/Self-Esteem _____

Biological Needs _____

Physical Appearance _____

Appendix E

NEO Five-Factor Inventory (NEO-FFI)

NEO-FFI

Instructions:

Please rate how much you agree or disagree with each statement below by circling one of the scale categories. Use the scale categories as shown below. Be sure to chose the scale category that most accurately describes you as you really are. Answer fairly quickly, and make use of all levels of the scale in your answers. The questionnaire will take about 5-10 minutes to complete.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
SD	D	N	A	SA

1. I am not a worrier.	SD	D	N	A	SA
2. I like to have a lot of people around me.	SD	D	N	A	SA
3. I don't like to waste my time daydreaming.	SD	D	N	A	SA
4. I try to be courteous to everyone I meet.	SD	D	N	A	SA
5. I keep my belongings clean and neat.	SD	D	N	A	SA
6. I often feel inferior to others.	SD	D	N	A	SA
7. I laugh easily.	SD	D	N	A	SA
8. Once I find the right way to do something, I stick to it.	SD	D	N	A	SA

9. I often get into arguments with my family and co-workers.	SD	D	N	A	SA
10. I'm pretty good about pacing myself so as to get things done on time.	SD	D	N	A	SA
11. When I'm under a great deal of stress, sometimes I feel like I'm going to pieces.	SD	D	N	A	SA
12. I don't consider myself especially "light-hearted."	SD	D	N	A	SA
13. I am intrigued by the patterns I find in art and nature.	SD	D	N	A	SA
14. Some people think I'm selfish and egotistical.	SD	D	N	A	SA
15. I am not a very methodical person.	SD	D	N	A	SA
16. I rarely feel lonely or blue.	SD	D	N	A	SA
17. I really enjoy talking to people.	SD	D	N	A	SA
18. I believe letting students hear controversial speakers can only confuse and mislead them.	SD	D	N	A	SA
19. I would rather cooperate with others than compete with them.	SD	D	N	A	SA
20. I try to perform all the tasks assigned to me conscientiously.	SD	D	N	A	SA
21. I often feel tense and jittery.	SD	D	N	A	SA

22. I like to be where the action is.	SD	D	N	A	SA
23. Poetry has little or no effect on me.	SD	D	N	A	SA
24. I tend to be cynical and skeptical of others' intentions.	SD	D	N	A	SA
25. I have a clear set of goals and work toward them in an orderly fashion.	SD	D	N	A	SA
26. Sometimes I feel completely worthless.	SD	D	N	A	SA
27. I usually prefer to do things alone.	SD	D	N	A	SA
28. I often try new and foreign foods.	SD	D	N	A	SA
29. I believe that most people will take advantage of you if you let them.	SD	D	N	A	SA
30. I waste a lot of time before settling down to work.	SD	D	N	A	SA
31. I rarely feel fearful or anxious.	SD	D	N	A	SA
32. I often feel as if I'm bursting with energy.	SD	D	N	A	SA
33. I seldom notice the moods or feelings that different environments produce.	SD	D	N	A	SA
34. Most people I know like me.	SD	D	N	A	SA
35. I work hard to accomplish my goals.	SD	D	N	A	SA
36. I often get angry at the way people treat me.	SD	D	N	A	SA
37. I am a cheerful, high-spirited person.	SD	D	N	A	SA

38. I believe we should look to our religious authorities for decisions on moral issues.	SD	D	N	A	SA
39. Some people think of me as cold and calculating.	SD	D	N	A	SA
40. When I make a commitment, I can always be counted on to follow through.	SD	D	N	A	SA
41. Too often, when things go wrong, I get discouraged and feel like giving up.	SD	D	N	A	SA
42. I am not a cheerful optimist.	SD	D	N	A	SA
43. Sometimes when I am reading poetry or looking at a work of art, I feel a chill or wave of excitement.	SD	D	N	A	SA
44. I'm hard-headed and tough-minded in my attitudes.	SD	D	N	A	SA
45. Sometimes I'm not as dependable or reliable as I should be.	SD	D	N	A	SA
46. I am seldom sad or depressed.	SD	D	N	A	SA
47. My life is fast-paced.	SD	D	N	A	SA
48. I have little interest in speculating on the nature of the universe or the human condition.	SD	D	N	A	SA
49. I generally try to be thoughtful or considerate.	SD	D	N	A	SA

50. I am a productive person who always gets the job done.	SD	D	N	A	SA
51. I often feel helpless and want someone else to solve my problems.	SD	D	N	A	SA
52. I am a very active person.	SD	D	N	A	SA
53. I have a lot of intellectual curiosity.	SD	D	N	A	SA
54. If I don't like people, I let them know it.	SD	D	N	A	SA
55. I never seem to be able to get organized.	SD	D	N	A	SA
56. At times I have been so ashamed I just wanted to hide.	SD	D	N	A	SA
57. I would rather go my own way than be a leader of others.	SD	D	N	A	SA
58. I often enjoy playing with theories or abstract ideas.	SD	D	N	A	SA
59. If necessary, I am willing to manipulate people get what I want.	SD	D	N	A	SA
60. I strive for excellence in everything I do.	SD	D	N	A	SA

Appendix F

Revised Hassles and Uplifts Scale

Revised Hassles and Uplifts Scale

Hassles are irritants that can range from minor annoyances to fairly major pressures, problems and difficulties.

If you have not had the hassles listed below during the past 30 days, then you should check the first space - it is labeled "HAVEN'T HAD". If you have had the hassles, then you should try to estimate how strong it was (or is) for you by checking one of the three remaining spaces.

Please try not to omit any of these hassles.

	How Strong?			
Hassles	HAVEN'T HAD	SOMEWHAT	MODERATELY	EXTREMELY
1. Too many responsibilities	_____	_____	_____	_____
2. Too many interruptions	_____	_____	_____	_____
3. Fear of rejection	_____	_____	_____	_____
4. Not enough personal energy	_____	_____	_____	_____
5. Concerns about inner				

conflicts	_____	_____	_____	_____
6. Feel conflicted over what to do	_____	_____	_____	_____
7. Regrets over past decisions	_____	_____	_____	_____
8. Concerns about getting ahead	_____	_____	_____	_____
9. Not enough money for entertainment and recreation	_____	_____	_____	_____
10. Noise	_____	_____	_____	_____

Uplifts are events that make you feel good.

If you have not had the uplifts listed below during the past 30 days, then you should check the first space - it is labeled "HAVEN'T HAD". If you have had the uplifts, then you should try to estimate how strong it was (or is) for you by checking one of the three remaining spaces.

Please try not to omit any of the uplifts.

		How Strong?		
UPLIFTS	HAVEN'T HAD	SOMEWHAT	MODERATELY	EXTREMELY
1. Resolving conflicts over what to do	_____	_____	_____	_____
2. Sharing something	_____	_____	_____	_____
3. Having enough money for entertainment and recreation	_____	_____	_____	_____
4. Recreation (sports, games, etc.)	_____	_____	_____	_____
5. Using skills well at work	_____	_____	_____	_____
6. Being	_____	_____	_____	_____

complimented

7. Expressing yourself well	_____	_____	_____	_____
8. Having fun	_____	_____	_____	_____
9. Pleasant smells	_____	_____	_____	_____
10.Making decisions	_____	_____	_____	_____
11. Fresh air	_____	_____	_____	_____
12. Meeting a challenge	_____	_____	_____	_____

Appendix G

Satisfaction with Life Scale

Below are five statements that you may agree or disagree with. Using the 1-7 scale below, indicate your agreement with each item by placing the appropriate number on the line preceding that item. Please be open and honest in your responding.

7 - Strongly agree
6 - Agree
5 - Slightly agree
4 - neither agree nor disagree
3 - Slightly disagree
2 - Disagree
1 - Strongly disagree

_____ (A) In most ways my life is close to my ideal.

_____ (B) The conditions of my life are excellent.

_____ (C) I am satisfied with my life.

_____ (D) So far I have gotten the important things I want out of life.

_____ (E) If I could live my life over, I would change almost nothing.

Appendix H

Scales of Psychological Well-Being

Ryff's Scale of Psychological Well-Being

The next set of questions deals with how you feel about yourself and your life. Please remember that there are no right or wrong answers. Using the six point scale, please indicate the number that best describes you present agreement or disagreement with each statement.

1 = strongly disagree 2 = moderately disagree 3 = slightly disagree 4 = slightly agree 5 = moderately agree 6 = strongly agree

1. Most people see me as loving and affectionate. _____

2. Sometimes I change the way I act or think to be more like those around me. _____

3. In general, I feel I am in charge of the situation in which I live. _____

4. I am not interested in activities that will expand my horizons. _____

5. I feel good when I think of what I've done in the in the past and what I hope to do in the future. _____

6. When I look at the story of my life, I am pleased with how things have turned out. _____

7. Maintaining close relationships has been difficult and frustrating for me. _____

1 = strongly disagree 2 = moderately disagree 3 = slightly disagree 4 = slightly agree

5 = moderately agree 6 = strongly agree

8. I am not afraid to voice my opinions, even when _____
they are in opposition to the opinions of most people.

9. The demands of everyday life often get me down. _____

10. In general, I feel that I continue to learn more about myself as time goes by. _____

11. I live life one day at a time and don't really think about the future. _____

12. In general, I feel confident and positive about myself. _____

13. I often feel lonely because I have few close friends _____
with whom to share my concerns.

14. My decisions are not usually influenced by what everyone else is doing. _____

15. I do not fit very well with the people and the community around me. _____

16. I am the kind of person who likes to give new things a try. _____

17. I tend to focus on the present, because the future nearly _____
always brings me problems.

18. I feel that many of the people I know have gotten _____
more out of life than I have.

19. I enjoy personal and mutual conversations with family members or friends. _____

20. I tend to worry about what other people think of me. _____

1 = strongly disagree 2 = moderately disagree 3 = slightly disagree 4 = slightly agree

5 = moderately agree 6 = strongly agree

21. I am quite good at managing the many responsibilities of my daily life. _____

22. I don't want to try new ways of doing things--my life is fine the way it is. _____

23. I have a sense of direction and purpose in life. _____

24. Given the opportunity, there are many things about myself that _____
I would change.

25. It is important to me to be a good listener, when close _____
friends talk to me about their problems.

26. Being happy with myself is more important to me than _____
having others approve of me.

27. I often feel overwhelmed by my responsibilities. _____

28. I think it is important to have new experiences that _____
challenge how you think about yourself and the world.

29. My daily activities often seem trivial and _____
unimportant to me.

30. I like most aspects of my personality _____

31. I don't have many people who want to listen when I need to talk. _____

32. I tend to be influenced by people with strong opinions. _____

1 = strongly disagree 2 = moderately disagree 3 = slightly disagree 4 = slightly agree

5 = moderately agree 6 = strongly agree

33. If I were unhappy with my living situation, I would take _____
effective steps to change it.

34. When I think about it, I haven't really improved much as a person _____
over the years.

35. I don't have a good sense of what it is I'm trying to accomplish in life. _____

36. I made some mistakes in the past, but I feel that all in all _____
everything has worked out for the best.

37. I feel that I get a lot out of my friendships. _____

38. People rarely talk me into doing things I don't want to do. _____

39. I generally do a good job of taking care of my personal finances and affairs. _____

40. In my view, people of every age are able to continue growing and developing. _____

41. I used to set goals for myself, but that now seems like a waste of time. _____

42. In many ways, I feel disappointed about my achievements in life. _____

43. It seems to me that most other people have more friends than I do. _____

44. It is more important to me to "fit in" with others than to _____
stand alone on my principles.

45. I find it stressful that I can't keep up with all of the things _____
I have to do each day.

1 = strongly disagree 2 = moderately disagree 3 = slightly disagree 4 = slightly agree

5 = moderately agree 6 = strongly agree

46. With time, I have gained a lot of insight about life that has made _____
me a stronger, more capable person.

47. I enjoy making plans for the future and working to make them a reality. _____

48. For the most part, I am proud of who I am and the life I lead. _____

49. People would describe me as a giving person, willing to _____
share my time with others.

50. I have confidence in my own opinions, even if they are _____
contrary to the general consensus.

51. I am good at juggling my time so that I can fit everything _____
in that needs to be done.

52. I have the sense that I have developed a lot as a person over time. _____

53. I am an active person in carrying out the plans I set for myself. _____

54. I envy many people for the lives they lead. _____

55. I have not experienced many warm and trusting relationships with others. _____

56. It's difficult for me to voice my own opinions on controversial manners. _____

57. My daily life is busy, but I derive a sense of satisfaction from keeping up with _____
everything.

1 = strongly disagree 2 = moderately disagree 3 = slightly disagree 4 = slightly agree

5 = moderately agree 6 = strongly agree

58. I do not enjoy being in new situations that require me to change _____
my old familiar ways of doing things.

59. Some people wander aimlessly through life, but I not one of them. _____

60. My attitude about myself is probably not as positive as most _____
people's attitudes about themselves.

61. I often feel as if I'm on the outside looking in when it comes to friendships. _____

62. I often change my mind about decisions if my friends or family disagree. _____

63. I get frustrated when trying to plan my daily activities _____
because I never accomplish the things I set out to do.

64. For me, life has been a continuous process of learning, changing, and growth. _____

65. I sometimes feel as if I've done all there is to do in life. _____

66. Many days I wake up feeling discouraged about how I have lived my life. _____

67. I know that I can trust my friends, and they know they can trust me. _____

68. I am not the kind of person who gives in to social pressures _____
to think or act in certain ways.

69. My efforts to find the kinds of activities and relationships that _____
I need have been quite successful.

70. I enjoy seeing how my views have changed and matured over the years. _____

1 = strongly disagree 2 = moderately disagree 3 = slightly disagree 4 = slightly agree

5 = moderately agree 6 = strongly agree

71. My aims in life have been more a source of satisfaction _____
than frustration to me.

72. The past had its ups and downs, but in general, I wouldn't want _____
to change it.

73. I find it difficult to really open up when I talk with others. _____

74. I am concerned about how other people evaluate the choices I have made _____
in my life.

75. I have difficulty arranging my life in a way that is satisfying to me. _____

76. I gave up trying to make big improvements or changes in my life _____
a long time ago.

77. I find it satisfying to think about what I have accomplished in life. _____

78. When I compare myself to friends and acquaintances, it makes me feel _____
good about who I am.

79. My friends and I sympathize with each other's problems. _____

80. I judge myself by what I think is important, not by what _____
others think is important.

81. I have been able to build a home and a lifestyle for myself that is much _____
to my liking.

1 = strongly disagree 2 = moderately disagree 3 = slightly disagree 4 = slightly agree

5 = moderately agree 6 = strongly agree

82. There is truth to the saying that you can't teach an old dog new tricks. _____

83. In the final analysis, I'm not so sure that my life adds up to much. _____

84. Everyone has weaknesses, but I seem to have more than my share. _____